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DARK POOL REGULATION: FOSTERING INNOVATION AND COMPETITION WHILE PROTECTING INVESTORS

INTRODUCTION

A fight has broken out between long-time Wall Street associates, the stock exchanges, and the broker-dealers; regulators around the globe are taking sides.¹ The fight is over dark pools, the off-exchange marketplaces where broker-dealers execute trades without displaying the price quotes to the public.² As these pools gain more and more of the daily trading volume,³ regulators are weighing the benefits of increased competition against the potential risks.⁴

Spawned from the stock market deregulation brought on by the Securities Act Amendments of 1975 (1975 Amendments),⁵ dark pools were originally developed to allow institutional investors⁶ to execute large orders without causing the markets to move.⁷ As trading became increasingly electronic with the advent of the internet (and moved away from the traditional exchanges), dark pools became increasingly popular as a way to hide institutional orders from the predatory activities of high-frequency traders (HFT).⁸ Today however, there are growing concerns that this increased activity in the dark is hurting the markets and investors.⁹

1. Scott Patterson, *Dark Pool Brawl Breaks Out*, WALL ST. J. (Apr. 17, 2013, 9:26 AM), <http://blogs.wsj.com/moneybeat/2013/04/17/nyse-credit-suisse-spat-shines-light-on-dark-pools/>.

2. While dark pools can be used to trade a variety of financial products including stock options and corporate bonds, this Note will focus on pools that are used for NMS securities trading as defined in 17 C.F.R. § 242.600(b)(46). *Id.*

3. Dark pools accounted for nearly 14.7% of total equity volume, up from 11.4% in 2010 and 6.45% in 2008. Phil Albinus, *Dark Pools Offer Better Prices but Trade Size is Dropping: Report*, TRADER MAGAZINE.COM (Nov. 20, 2013), <http://www.tradersmagazine.com/news/dark-pools-offer-better-prices-but-size-order-is-dropping-report-111790-1.html>.

4. Stephen Joyce, *SEC Contemplating Effects of Dark Pools As It Considers Market Structure Reforms*, 45 SEC. REG. & L. REP. (BNA) 768 (2013).

5. Securities Act Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 94 (amended 1975); Roberta S. Karmel, *Securities Regulation: High Frequency Trading, Direct Electronic Access and Dark Pools*, N.Y. L.J., Dec. 15, 2011, at 3.

6. Institutional investors include pension funds, banks, broker-dealers, and insurance companies who typically trade large quantities of stock during a single trade. 16 C.F.R. § 802.64(a) (2014); 17 C.F.R. § 230.215(a) (2014).

7. Stock prices are a function of supply and demand. The more investors want to buy a stock, the higher the price will go. Conversely, less demand for a stock will decrease stock price. If an investor shows the market they want to buy or sell a large quantity of shares, the market would move against them and they would receive a worse price. *Dark Pools, Flash Orders, High Frequency Trading, and Other Market Structure Issues: Hearing Before the Subcomm. on Sec., Ins., and Inv. of the Comm. on Banking, Hous., and Urban Affairs*, 111th Cong. 58 (2009) [hereinafter *Brigagliano statement*] (statement of James. A. Brigagliano, Co-Acting Dir., Div. of Trading & Markets, SEC).

8. High-frequency traders use sophisticated algorithms that trade at extreme rates of speed in order to exploit market disparities. Karmel, *supra* note 5, at 3. See also Richard Finger, *High Frequency Trading: Is It A Dark Force Against Ordinary Human Traders And Investors?*,

The stock exchanges, which risk losing revenue the more trades are executed away from their platforms,¹⁰ argue that these dark pools reduce liquidity and increase price disparity in the public or lit markets.¹¹ They want stronger regulations, if not a complete ban, on dark trading.¹² Dark pool operators defend their systems, saying they provide a needed service to their institutional clients who risk adverse price movements when trades are displayed.¹³ They also argue that the competition has lowered costs to investors, particularly retail investors.¹⁴ With varying results from the academic community on whether dark pools actually hurt the markets, regulators need to determine whether the increased competition in the securities markets is beneficial to investors or whether these dark pools are hurting price discovery and liquidity and need further regulation.¹⁵

This Note will explore the regulatory environment surrounding dark pools and the implications of proposed regulations. Part I provides an introduction to dark pools, including why they were developed, who operates them, why they are used, and by whom. It will also give the regulatory history behind their rise. Part II discusses the major issues causing regulators to pursue stricter controls on dark pool trading. Part III describes the proposed and implemented international responses to dark pools and their effects on the markets. Part IV reviews the current U.S. regulations and the proposals of the Securities and Exchange Commission

FORBES (Sept. 30, 2013, 8:41 AM), <http://onforb.es/1eTNjQa> (explaining the tactics used by high-frequency traders).

9. Dave Michaels, *Stock Exchanges Seek Curbs on Dark Pools to Fight Exodus*, BLOOMBERG.COM (Jun. 4, 2013), <http://www.bloomberg.com/news/2013-06-04/stock-exchanges-look-for-curb-on-dark-pools-to-fight-exodus.html> (citing concerns from the U.S. stock exchanges that dark pools are creating higher costs and volatility, and also noting that dark pools account for almost fifteen percent of the daily trading volume in NMS securities).

10. Juliet Lapidus, *How Does a Stock Exchange Make Money?*, SLATE.COM (Feb. 16, 2011), http://www.slate.com/articles/news_and_politics/explainer/2011/02/how_does_a_stock_exchange_make_money.html (explaining how stock markets make money by charging commissions on shares traded and how the increase in competition has driven trading volume down, thus lowering revenue).

11. *Computerized Trading Venues: What Should the Rules of the Road Be?: Hearing Before the Subcomm. on Sec., Ins., and Inv. of the Comm. on Banking, Hous. and Urban Affairs*, 112th Cong. 27–28 (2012) (statement of Joseph Mecane, Exec. Vice President & Head of U.S. Equities, NYSE Euronext); *Dark Pools, Flash Orders, High Frequency Trading, and Other Market Structure Issues: Hearing Before the Subcomm. on Sec., Ins., and Inv. of the Comm. on Banking, Hous. and Urban Affairs*, 111th Cong. 9–10 (2009) [hereinafter *Hatheway statement*] (statement of Frank Hatheway, Chief Economist, NASDAQ OMX).

12. Laura Marcinek & Whitney Kisling, *Former NYSE CEO Thain Says Stock Dark Pools Should Be Closed*, BLOOMBERG.COM (Sept. 17, 2013), <http://www.bloomberg.com/news/2013-09-17/former-nyse-ceo-thain-says-stock-dark-pools-should-be-eliminated.html>.

13. Joan E. Solsman, *Goldman Sachs Defends Dark Pools, Short Selling*, WALL ST. J. (Oct. 27, 2009, 2:12 PM), <http://www.wsj.com/articles/SB125665689267210559>; Cyrus Sanati, *Credit Suisse Banker Defends Those 'Dark Pools'*, N.Y. TIMES (Nov. 2, 2009, 9:00 AM), http://dealbook.nytimes.com/2009/11/02/credit-suisse-banker-defends-those-dark-pools/comment-page-1/?_r=0.

14. Solsman, *supra* note 13; Sanati, *supra* note 13.

15. Joyce, *supra* note 4.

(SEC) and Financial Industry Regulatory Authority (FINRA) regarding dark pools. Part V discusses the implications for U.S. markets if the SEC were to follow international regulators by curbing dark pool activity or pursue a full ban. It is the position of this Note that there is insufficient evidence that dark pools are hurting the market place, and the SEC should continue to focus on increasing competition and access in a fair and open market.

I. HISTORY AND BACKGROUND ON DARK POOL REGULATION

The mission of the SEC is to protect investors while maintaining fair, orderly, and efficient markets.¹⁶ In pursuing these principles, the SEC has adopted regulations that have greatly increased competition in the stock market and significantly lowered the costs.¹⁷ While this push toward competitive markets has allowed for the development of national securities exchanges,¹⁸ it has also led to the growth of competing platforms called alternative trading systems (ATS).¹⁹ These trading systems effectively act like exchanges, matching buyers and sellers of securities in a central location.²⁰ However, ATSS are registered as broker-dealers and are subject to regulations which govern them as such.²¹ Unlike the national securities exchanges, which publicly display the best quote for both the buy and sell side of the market, ATSS are not required to do so.²² Some choose to display this information to the public, but others do not.²³ A dark pool is a type of ATS that matches buyers and sellers, but does not display pre-trade quotes outside of the system.²⁴ While there have been many acts and

16. *What We Do*, SEC, <http://www.sec.gov/about/whatwedo.shtml> (last visited Feb. 1, 2015).

17. *Brigagliano statement*, *supra* note 7, at 57.

18. A national securities exchange is registered under Section 6 of the Securities Exchange Act of 1934 with the SEC. The New York Stock Exchange and The NASDAQ Stock Market are two examples of national securities exchanges. *Division of Trading and Markets: Exchanges, Other Markets, Broker-Dealers, Clearing Agencies, Transfer Agents, and NRSROs*, SEC, <http://www.sec.gov/divisions/marketreg/mrexchanges.shtml> (last visited Nov. 30, 2013).

19. *Brigagliano statement*, *supra* note 7, at 57.

20. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. 70844, 70845 (Dec. 22, 1998).

21. Gabriel Matus, *The Regulation of Alternative Trading Systems: Market Fragmentation and the New Market Structure*, 44 N.Y.L. SCH. L. REV. 583, 596 (2001).

22. ATSS are only required to display their best priced orders if they exceed five percent of the trading volume of an individual stock. SEC, SPECIAL STUDY: ELECTRONIC COMMUNICATION NETWORKS AND AFTER-HOURS TRADING (2000), *available at* <http://www.sec.gov/news/studies/ecnafter.htm>.

23. Electronic Communication Networks (ECN) are a subset of ATSS that display quotes to the public markets. LAURA TUTTLE, SEC, ALTERNATIVE TRADING SYSTEMS: DESCRIPTION OF ATS TRADING IN NATIONAL MARKET SYSTEM STOCKS 2 n.8 (2013) [hereinafter DESCRIPTION OF ATS TRADING].

24. Trading interest is considered dark primarily when it is not included in the consolidated quotation data for NMS stocks. Consolidated market data is the primary vehicle for public price transparency in the U.S. equity markets and it includes real-time information on the best-priced

regulations that have contributed to the competitive securities markets in the United States, this Note will focus on the key regulations that have led to the growth of dark pools:²⁵ the 1975 Amendments,²⁶ Regulation of Exchanges and Alternative Trading Systems (Regulation ATS),²⁷ and Regulation NMS.²⁸

A. SECURITIES ACT AMENDMENTS OF 1975

Prior to the 1970's, stock trading was dominated by the national securities exchanges, with the New York Stock Exchange (NYSE) having a virtual monopoly.²⁹ After a surge in trading volume caused a crisis on Wall Street in the 1960's, Congress was forced to review the structure of the securities markets.³⁰ Among other things, the reports commissioned to review and provide recommendations noted the anti-competitive nature of the fixed commission system,³¹ concerns about the negative effects the increased holdings of institutional investors were having on the auction market system, and price discrepancies between the national securities

quotations, which trades may be executed, and real-time reports of trades as they execute. Dark pools may vary in the degree to which they display information even within their systems. Regulation of Non-Public Trading Interest, 74 Fed. Reg. 61208, 61209 (proposed Nov. 13, 2009); DESCRIPTION OF ATS TRADING, *supra* note 23, at 2 n.8.

25. *See, e.g.*, Order Execution Obligations, 61 Fed. Reg. 48290, 48303 n.170 (Sept. 12, 1996); Order Directing the Exchanges and the National Association of Securities Dealers, Inc. to Submit a Decimalization Implementation Plan Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act of 1934, 65 Fed. Reg. 5003 (Jan. 28, 2000).

26. *See generally* Securities Act Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 94 (amended 1975).

27. *See generally* Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. 70844, 70846 (Dec. 22, 1998).

28. *See generally* Regulation NMS, 70 Fed. Reg. 37496 (June 29, 2005).

29. Megan Grove, *Cincinnati Stock Exchange: The Birth of the Modern Stock Market*, CINCINNATI STOCK EXCHANGE, <http://www.cincinnatistockexchange.us/the-birth-of-the-modern-stock-market> (last visited Nov. 18, 2013) (noting that the New York Stock Exchange had close to 90% of market share).

30. Stock trading volume increased from five million shares a day in 1965 to twelve million shares a day in 1968, overwhelming brokers' ability to transfer and keep records of the securities. The back offices of brokerages were so overwhelmed that at one point the stock markets were forced to stop trading on Wednesday and shorten trading hours. Large fines, increased interest payments to customers, and costly computer upgrades forced six brokers out of business. Wyatt Wells, *Certificates and Computers: The Remaking of Wall Street, 1967 to 1971*, 74 BUS. HIST. REV. 193, 214-215 (2000); Philip A. Loomis, Jr., Comm'r, SEC, Address at the Joint Securities Conference: The Securities Acts Amendments of 1975, Self-Regulation and the National Market System (Nov. 18, 1975), available at <http://www.sec.gov/news/speech/1975/111875loomis.pdf>.

31. In the fixed rate system, prices and services allowed by its members were set in the rules of the exchanges which all of its members were required to follow. The New York Stock Exchange, for example, did not allow its members to offer volume discounts and members needed permission from the exchange before they could execute a transaction of a listed stock off of the exchange. Members of the exchanges therefore competed against each other based on services provided, not price. Richard W. Jennings, *The New York Stock Exchange and the Commission Rate Struggle*, 53 CALIF. L. REV. 1119, 1119-20 (1965). *See also* A.A. Somer, Jr., Comm'r, SEC, Remarks at the Seminar on the Analysis of Security Prices: The New Breath of Competition (May 15, 1975), available at <http://www.sec.gov/news/speech/1975/051575somer-1.pdf>.

exchanges.³² Designed to increase competition in the stock markets and eliminate these issues, the 1975 Amendments set up the “framework in which competing markets would be linked together in ways that would produce the best prices and efficient executions.”³³

Prior to the 1975 Amendments, there were no requirements for stock exchanges to disseminate information to the public, nor were there any requirements as to what information they would supply or who would get it if they did.³⁴ This limited public access to the information and allowed for wide price discrepancies for the same stock on different exchanges.³⁵ Without a linkage between markets, the best prices on one exchange were not seen by other exchanges, thus hindering the ability of investors to get the best price.³⁶ The stock exchanges, especially the NYSE, also set strict rules and commission structures, which limited their members. Among other rules, the NYSE imposed a strict commission system for all trading of NYSE-listed stocks and required its members to obtain permission before executing a transaction off of the exchange floor.³⁷ The NYSE also required non-members to pay a substantially higher rate for transactions.³⁸

The 1975 Amendments aimed to increase competition and fair access to the markets by restricting the barriers to entry imposed by the stock exchanges.³⁹ It also called for a national securities market.⁴⁰ Under the 1975

32. Congress and the exchanges commissioned several major reports to study the stock markets and propose solutions to the growing volume of trades. The Martin Report, which was commissioned by the NYSE and written by an independent unpaid advisor, recommended a central market system to provide a single auction market. The SEC rejected the single market idea and instead opted for a system of competing exchanges. *Federal Legislation to Enhance Competition in the Securities Industry*, 16 WM. & MARY L. REV. 621, 640–41 (1975); Philip A. Loomis, Jr., Comm’r, SEC, Address to the Florida Security Dealers Association: The Implementation of the Central Market System (Nov. 1, 1974), available at <http://www.sec.gov/news/speech/1974/110174loomis.pdf>. See generally Arthur Levitt, *Imagine an Investor: Washington’s Historical Role in Shaping the Industry Through Regulation and Legislation*, CURRENT PERSPECTIVES ON MODERN EQUITY MARKETS: A COLLECTION OF ESSAYS BY FINANCIAL INDUSTRY EXPERTS 21, 22–23 (2010) (noting that although the SEC recognized the potential for price discrepancies among competing markets it was more concerned with the monopolistic nature of the NYSE).

33. SEC, *supra* note 22.

34. *Preserving and Strengthening the National Market System for Securities in the United States: Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs*, 107th Cong. (2000) [hereinafter *Levitt statement*] (statement of Arthur Levitt, Chairman, SEC).

35. Grove, *supra* note 29; *Levitt statement*, *supra* note 34.

36. *Levitt statement*, *supra* note 34.

37. Jennings, *supra* note 31, 1119–20.

38. *Id.* at 1119.

39. Roger D. Blanc, *Intermarket Competition and Monopoly Power In the U.S. Stock Markets*, 1 BROOK. J. CORP. FIN. & COM. L. 273, 297–98 (2007).

40. The national market system as we know it today provides both the prices of the stocks sold in real time as well as pre-trade price transparency. Joel Hasbrouck, George Sofianos & Deborah Sosebee, *New York Stock Exchange Systems and Trading Procedures* 12 (NYSE, Working Paper No. 93-01, 1993) [hereinafter *NYSE Systems and Trading Procedures*], available at <http://people.stern.nyu.edu/jhasbrou/Research/Working%20Papers/NYSE.PDF> (referring to SEC Rule 11Ac1-1 (b)).

Amendments, the stock exchanges were required to set up a national market system where price quotes could be seen by all interested parties with limited restrictions.⁴¹ The SEC was instructed to create a system which would maintain fair and orderly markets that tie together buying and selling interest, giving investors the best possible execution of their orders, regardless of where the order was placed.⁴² While Congress did not specifically say how the system was to function, it did give five key objectives: (1) economically efficient executions; (2) fair competition; (3) the availability of market information; (4) best execution; and (5) direct interaction among investor orders.⁴³

Central to the issues facing the stock markets today, including dark pools, was the SEC's decision to develop a system that focused on competition among all the market participants.⁴⁴ Spurning a recommendation in the Martin Report to develop a system with a single central location, the SEC opted to establish one with many competing exchanges believing the increased competition would benefit investors.⁴⁵ The establishment of the national market system as well as the abolition of the fixed rate system allowed brokers to compete equally both on price and service, paving the way for ATs and dark pools.⁴⁶

B. REGULATION ATs

While the establishment of a national market system greatly reduced price discrepancy between exchanges, it also had an unforeseen impact on institutional traders, particularly as technology improved.⁴⁷ In the

41. Exchanges can charge "fair, reasonable, and non-discriminatory fees" for their quotes but they cannot charge fees that "would restrict the wide availability of their information to investors." *Levitt statement, supra* note 34, at n.10.

42. *The Future of the Securities Markets: Hearing Before the Subcomm. on Sec. and Inv. of the Comm. on Banking, Hous., and Urban Affairs*, 108th Cong. 27 (2003) (statement of William H. Donaldson, Chairman, SEC).

43. *Id.*

44. Lanny Schwartz, *Suggestions for Procedural Reform in Securities Market Regulation*, 1 BROOK. J. CORP. FIN. & COM. L. 409, 413-14 (2007).

45. Somer, *supra* note 31, at 15-16; *Future Structure of the Securities Markets*, 37 Fed. Reg. 5286, 5286-88 (1972); WILLIAM MCCHESENEY MARTIN, JR., *THE SECURITIES MARKETS* 4 (1971).

46. Karmel, *supra* note 5.

The rise in dark pools began with the deregulation of the securities exchanges in 1975. Prior to 1975, dark pools were not possible because maintenance of fixed commission rates came with a constraint prohibiting exchange members from trading exchange-listed securities off the exchange board In 1975, however, the fixed commission regime ended and so did the ban on off-exchange trading in various situations, opening the door for off-exchange venues such as dark pools.

Id.

47. Regulation of Non-Public Trading Interest, 74 Fed. Reg. 61208, 61208-09 n.4 (proposed Nov. 13, 2009).

[A] significant implicit cost for large investors (who often represent the consolidated investments of many individuals) is the price impact that their large trades can have on

beginning, large institutional trades could be negotiated off the trading floor, or “upstairs.”⁴⁸ These transactions were done privately between the buyer and seller and reported to the stock exchange floor and national market system once it was final.⁴⁹ Large block trades⁵⁰ could also be “worked” by market makers by breaking the order into pieces and sending them into the market as smaller trades.⁵¹ Both methods allowed the institutional trader to mask the size of the order until the full execution was complete, therefore having less of an impact on the markets.⁵² But with the shift to electronic exchanges in the 1990’s and the growth of HFT, it became harder for these institutional trades to be disguised.⁵³

In response to the change in the market and their desire to cater to institutional investors, broker-dealers developed in-house systems that match large orders between their customers or their own trading book.⁵⁴ Customers in these dark pools anonymously enter their orders and are matched with other orders in the system.⁵⁵ Unlike national securities exchanges, which tend to rely on high-frequency trading for liquidity and are barred from erecting barriers to entry by regulation, dark pools can cater to the needs of institutional investors and limit access to the pools.⁵⁶ This not only allows the institutional investor to input trades without fear that the market will detect and go against them, but also reduces the possibility that the brokers themselves will jump in front of an investor’s order, or “front run.”⁵⁷

the market. Indeed, disclosure of these large orders can reduce the likelihood of their being filled. Consequently, large investors often seek ways to interact with order flow and participate in price competition without submitting a limit order that would display the full extent of their trading interest to the market. Among the ways large investors can achieve this objective are: (1) [t]o have their orders represented on the floor of an exchange market; (2) to submit their orders to a market center that offers a limit order book with a reserve size feature; or (3) to use a trading mechanism that permits some form of ‘hidden’ interest to interact with the other side of the market.

Id.

48. Donald B. Keim & Ananth Madhavan, *The Upstairs Market for Large-Block Transactions: Analysis and Measurement of Price Effects*, 9 REV. OF FIN. STUDIES 1, 2 (1996).

49. *Id.*

50. The NYSE defined block orders as a trade of 10,000 shares or \$200,000. *NYSE Systems and Trading Procedures*, *supra* note 40, at 4–5.

51. *Id.* at 5.

52. Steve Thel, *\$850,000 In Six Minutes—The Mechanics Of Securities Manipulation*, 79 CORNELL L. REV. 219, 225–26 (1994).

53. SCOTT PATTERSON, DARK POOLS 208 (2012).

54. *Id.*; Robert Hatch, *Reforming the Murky Depths of Wall Street: Putting the Spotlight on the Security and Exchange Commission’s Regulatory Proposal Concerning Dark Pools of Liquidity*, 78 GEO. WASH. L. REV. 1032, 1034–37 (2010).

55. Hatch, *supra* note 54, at 1037.

56. Bob Pisani, *ICE CEO: New Champion of the Little Guy?*, CNBC (Nov. 5, 2013, 4:56 PM), <http://www.cnbc.com/id/101172896>.

57. Schumpeter, *Shining a Light on Dark Pools*, ECONOMIST.COM (Aug. 18, 2011), <http://www.economist.com/blogs/schumpeter/2011/08/exchange-share-trading>.

As the stock markets relied on automation to execute trades in the 1990's, the SEC recognized that new technologies created a greater number of investment and execution choices, reduced costs, and increased market efficiency.⁵⁸ However, it also recognized that the technological changes had left the regulations "ill-equipped to respond to innovations" and raised concerns about fair access, full price disclosure, manipulation, and fraud.⁵⁹

Mindful of the increased use of technology by broker-dealers, which provided investors with a growing array of services at lower prices, the SEC adopted regulations aimed at ATSs to not only strengthen the public securities markets, but also to encourage innovation.⁶⁰ In particular, market participants developed a variety of ATSs that provided services traditionally offered solely by national securities exchanges.⁶¹ At the time, the SEC estimated that ATSs accounted for over twenty percent of over-the-counter stocks and four percent of NYSE securities.⁶² Determined to continue promoting fair, efficient, and transparent markets while also addressing the gap in regulation and concerns about the increased use of ATSs, the SEC adopted Regulation ATS.⁶³

In the regulation, the SEC distinguished between national securities exchanges and ATSs, and brought ATSs under regulatory authority.⁶⁴ Under Section 6 of the Securities Exchange Act of 1934 (Exchange Act), national securities exchanges are required to register with the SEC upon approval that their governing rules were designed, among other things, to prevent fraud and manipulation, remove impediments to a free and open market, promote just and equitable trade, and protect investors and the public interest.⁶⁵ The Exchange Act also barred them from unfair discrimination between customers, issuers, brokers, or dealers.⁶⁶ Regulation ATS reinterpreted exchanges to exclude systems that only routed orders to other facilities for execution, were operated by a single registered market maker to display its own quotes and orders to its customers, and systems that allow persons to enter orders for execution against the bids and offers of a single dealer.⁶⁷ These exemptions separated ATSs from national

58. Regulation of Exchanges, 62 Fed. Reg. 30485, 30488 (June 4, 1997).

59. *Id.* at 30486.

60. The SEC acknowledged that the current regulatory framework, designed decades earlier, did not envision many of the trading and business technologies being used. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. 70844, 70910 (Dec. 22, 1998).

61. *Id.* at 70845.

62. *Id.*

63. *Id.* at 70871.

64. *Id.* at 70844.

65. Bernard M. Plum, *Exchange Liability Under Section 6 of the Securities Exchange Act: The Plaintiff Problem*, 78 COLUM. L. REV. 112, 113-14 (1978).

66. See 15 U.S.C. § 78f (2012).

67. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. at 70847.

securities exchanges and encouraged their growth outside of the regulatory framework set for exchanges.⁶⁸

Regulation ATS allowed systems meeting the exemptions to decide whether to register as a national securities exchange or as a broker-dealer.⁶⁹ Rule 3a1-1 of the regulation allows ATS to avoid being considered “exchanges” and subject to the regulatory requirements associated with the label.⁷⁰ Under Regulation ATS, a system with less than five percent of the trading volume in all securities it trades is only required to file a notice of operation and quarterly reports with the SEC, maintain records including an audit trail of transactions, and refrain from using misleading labels such as “exchange” or “stock market.”⁷¹ Only when an ATS exceeds five percent of the daily volume of a security does it have to disseminate its best price quotes to the national exchanges.⁷²

C. REGULATION NMS

In 2005, the SEC adjusted its focus from competition among exchanges and ATSs to the competition among individual market orders.⁷³ The SEC adopted Regulation NMS to address the shortfalls in the regulation of the national market system over the last thirty years, which largely ignored the handling of orders placed by investors.⁷⁴ It recognized that the national market system was designed to promote fair competition among individual markets while assuring that all of these markets were linked together in a unified system that promoted interaction among orders.⁷⁵ But it also acknowledged there were issues caused by the competition among multiple markets trading in the same stocks.⁷⁶ The competition between market centers can detract from competition among individual orders in the same stock and impede efficient price discovery and increase costs for orders of all sizes.⁷⁷ Regulation NMS, therefore, sought to decrease cost for investors by increasing liquidity and market depth.⁷⁸ Prior to the regulation, institutional investors were able to use strategies that kept their orders secret in order to avoid market exploitation.⁷⁹ Regulation NMS, however, required

68. Laura S. Unger, Comm’r, SEC, Address at the Baruch Conference: Regulation of U.S. Equity Markets: Implications for Innovation, Competition, & Efficiency (Mar. 17, 1999).

69. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. at 70847.

70. *Id.*

71. *Id.*

72. *Id.*

73. NMS is in reference to the national market system. Regulation NMS, 70 Fed. Reg. 37496, 37497 (June 29, 2005).

74. *Id.* at 37499.

75. *Id.* at 37501.

76. *Id.* at 37499.

77. *Id.*

78. *Id.*

79. Roberta Karmel, *IOSCO’s Response to the Financial Crisis*, 37 J. CORP. L. 849, 892 (2012).

registered national exchanges to aggregate and publicize all quotes.⁸⁰ This forced broker-dealers to execute trades at the best price.⁸¹ Regulation NMS, along with stock price decimalization, made cloaking trades on national exchanges virtually impossible.⁸²

The first issue Regulation NMS sought to protect against was the occurrence of trade-throughs.⁸³ Before Regulation NMS, if institutional investors wanted to trade a large block of stock, they could offer a lower price than the market in order to entice a quick execution.⁸⁴ This act of “trading-through” the market price helped institutional investors execute their trades, but there was concern that smaller investors willing to display their orders were being passed over.⁸⁵ Regulation NMS attempted to fix this by requiring investors to get the best price available among displayed price quotations, which were immediately available for execution.⁸⁶ No longer could trades be executed at inferior prices, regardless of the reason.⁸⁷ This made it more difficult for large institutional investors to trade in public markets because their orders would have to be displayed at the risk of moving the market.⁸⁸

The second concern of Regulation NMS was fair access. Rule 610 of the regulation prohibits exchanges from imposing discriminatory terms that would prevent access and set a general limit on fees that trading centers could charge for accessing their quotations.⁸⁹ This allowed ATSS, which use the displayed public price for their own price quotes, to ensure they would not be discriminated against by the exchanges.⁹⁰ It also guaranteed them the same access as other trading centers and limited the fees they would have to pay for the access.⁹¹ Regulation NMS also required quotes to be displayed to all market participants unless the quotes were displayed to only one other person.⁹² Regulation NMS allowed dark pools and other ATSS fair and unfettered access to public information.⁹³ But whereas the exchanges were forced to provide this information, dark pools were not.⁹⁴

80. *Id.*

81. *Id.*

82. *Id.*

83. Regulation NMS, 70 Fed. Reg. at 37501.

84. *See id.*

85. *See id.*

86. *Id.* at 37496. *See also* GARY SHORTER, CONG. RESEARCH SERV., RS21871, TRADE-THROUGH RULE REFORM: THE SEC'S DEPTH OF BOOK ALTERNATIVE (2005).

87. SHORTER, *supra* note 86.

88. *Id.*

89. Regulation NMS, 70 Fed. Reg. at 37496.

90. *Id.*

91. *Id.*

92. *See id.* at 37502 (Access Rule).

93. *See id.* at 37548–50.

94. *See generally id.*

The effect of Regulation NMS was to push institutional investors to private ATSS where the regulation did not apply.⁹⁵ Institutional investors had to look for new ways to hide their trades and they found a solution in Regulation ATS.⁹⁶

II. CONCERN SURROUNDING DARK POOLS

Since the adoption of the 1975 Amendments, the SEC has been mandated to keep markets competitive, fair, and efficient.⁹⁷ But as trading has increased in dark pools, accounting for nearly fifteen percent of the overall trading volume, concern has grown.⁹⁸ In particular, regulators are concerned about transparency and price discovery, fragmentation, fair access, and the lack of knowledge about what actually happens in the dark pools.⁹⁹

A. TRANSPARENCY AND PRICE DISCOVERY

The first major concern surrounding dark pools is their lack of transparency and the impact it has on price discovery.¹⁰⁰ Price discovery is a function of supply and demand.¹⁰¹ As supply and demand fluctuates, prices adjust accordingly.¹⁰² Transparency refers to how much information about the market investors have access to.¹⁰³ The price discovery function of the markets relies on the transparency of the supply and demand for individual stocks.¹⁰⁴ The national market system was established with the hope that investors would know the true supply and demand for a particular stock at a particular price.¹⁰⁵ Prior to the establishment of the national market system in the 1970's, there was little transparency between national stock exchanges,¹⁰⁶ which caused an adverse impact on price discovery.¹⁰⁷ While this is no longer an issue (as the exchanges are required to publicly display the best prices and investors are required to get the best price), there is concern that dark pools are masking the true supply and demand.¹⁰⁸ As

95. See generally Regulation of Non-Public Trading Interest, 74 Fed. Reg. 61208, 61209 (proposed Nov. 13, 2009); Karmel, *supra* note 79, at 892.

96. Karmel, *supra* note 79, at 892.

97. Securities Acts Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 112 (amended 1975).

98. Albinus, *supra* note 3.

99. Nathaniel Popper, *Regulators Fret over Rise of Trading in the Shadows*, N.Y. TIMES, Apr. 1, 2013, at B1. See also INT'L ORG. OF SEC. COMM'NS, ISSUES RAISED BY DARK LIQUIDITY 5 (2010) [hereinafter ISSUES RAISED BY DARK LIQUIDITY].

100. Brigagliano statement, *supra* note 7, at 59.

101. Price Discovery, INVESTOPEDIA, <http://www.investopedia.com/terms/p/pricediscovery.asp> (last visited Dec. 1, 2013).

102. *Id.*

103. Brigagliano statement, *supra* note 7, at 59–60.

104. Hatheway statement, *supra* note 11, at 61.

105. ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99.

106. Levitt statement, *supra* note 34.

107. *Id.*

108. ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99, at 19.

more trades move into the dark, this could further inhibit the price discovery.¹⁰⁹

Pre-trade price display is essential to the price discovery process.¹¹⁰ As prices are displayed, it allows participants to determine whether they want to buy or sell that particular stock at that particular price.¹¹¹ If the other side is not interested in making the transaction, the displayed order may have to adjust or wait for someone willing to execute at that price to come along.¹¹² If a trade is being executed in a dark pool that otherwise should have been traded on the public markets, the true supply and demand for that stock is not captured by the public price quote. As more trading is done in the dark, the concern is that the public markets will not effectively display the true supply and demand in the markets.¹¹³ This could create wider trading spreads, increase volatility and have adverse effects on investors.¹¹⁴

B. FRAGMENTATION

The second major concern for regulators is market fragmentation.¹¹⁵ Fragmentation occurs when supply and demand does not find each other because of barriers between them.¹¹⁶ As competition increases and more trading systems appear, the supply and demand for stocks is spread across multiple venues that may not be connected.¹¹⁷ An order in one venue may not have a matching order in that same venue and may have to search other venues to execute the trade,¹¹⁸ which could increase the cost of execution.¹¹⁹ It could also stop the trade from being executed if a match cannot be found.¹²⁰ While fragmentation is caused by more than just dark pools, the increased use of such venues causes further fragmentation.¹²¹

C. FAIR ACCESS

Third, regulators are concerned with fair access to trading platforms.¹²² Because dark pools are run by broker-dealers, only customers and those

109. *Id.*

110. *Id.*

111. *Id.*

112. *Id.*

113. *Hatheway statement, supra* note 11, at 9–10.

114. John McCrank, *U.S. Securities Watchdog Proposes New Rules for “Dark Pools”*, REUTERS (Oct 1, 2013), <http://www.reuters.com/article/2013/10/01/regulation-darkpools-finra-idUSL1N0HR22X20131001>.

115. Mary L. Shapiro, Chairman, SEC, Remarks at IOSCO Technical Committee Conference (Oct. 8, 2009) (transcript available at SEC.com).

116. *See generally* ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99, at 20.

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.*

121. Shapiro, *supra* note 115.

122. James A. Brigagliano, Deputy Dir., Div. of Trading & Markets, SEC, Keynote Speech of the SIFMA Dark Pool Symposium (Jan. 21, 2010).

who are granted access to the pools are allowed to trade in them.¹²³ Not only does this add to market fragmentation, but it also runs counter to the SEC's promotion of fair access in Regulation NMS and the 1975 Amendments.¹²⁴ While dark pools and ATSS in general constitute a service that the broker-dealers provide for their customers and are not obliged to follow the rule of fair access that exchanges follow,¹²⁵ regulators are concerned with who and why these firms grant access.¹²⁶ There is also concern about who has access to information about liquidity within the pools, raising concern of a "two-tiered" market where participants in certain ATSS are privy to information that others are not.¹²⁷

D. RULES AND CONDUCT

Lastly, regulators are concerned about the rules and conduct of the dark pools.¹²⁸ Because they are regulated as broker-dealer functions and not as exchanges, they are not required to report such things as its users, the rules governing the pools, or how the pools work.¹²⁹ There is no oversight as to how the operators monitor and prevent fraud, and it is unknown whether the customers in the pools are fully aware of the rules and consequences of their trading.¹³⁰ Without oversight or knowledge of how the pools function, some participants may be unfairly disadvantaged for not knowing the "rules of the game."¹³¹

III. INTERNATIONAL RESPONSE

A. CANADA

As trading volume has increased in dark pools, international regulatory agencies have begun to take action to stem the tide. Canada's regulatory agencies were the first to specifically address issues with dark pools.¹³² In 2009, the Investment Industry Regulatory Organization of Canada

123. *Brigagliano statement*, *supra* note 7, at 57–60 (discussing non-public prices and barriers to entry).

124. Regulation NMS, 70 Fed. Reg. 37496 (June 29, 2005); Securities Act Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 94 (amended 1975).

125. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. 70844, 70845 (Dec. 22, 1998).

126. *Brigagliano statement*, *supra* note 7, at 59–60.

127. See ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99, at 20–23; *Brigagliano statement*, *supra* note 7, at 59.

128. ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99, at 20–23.

129. Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. at 70845.

130. ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99, at 20–23.

131. *Id.* at 21–22.

132. While Canada was the first to implement regulation to limit the use of dark pools, other regulatory agencies around the world, including the SEC, expressed concerns about their use and proposed regulations. See JOINT CAN. SEC. ADMIN./INV. INDUS. REGULATORY ORG. OF CAN., DARK LIQUIDITY IN THE CANADIAN MARKET (2010).

(IIROC)¹³³ and the Canadian Securities Administrators (CSA)¹³⁴ solicited comments from industry leaders regarding dark pools and the issues surrounding them in the Canadian markets.¹³⁵ Although, at the time, only two dark pools operated in Canada, and rules and regulations were already implemented, the IIROC and CSA recognized the shift of the securities industry away from a centralized marketplace to one with many competing marketplaces.¹³⁶ Concerned about efficient and effective markets, the CSA and IIROC identified liquidity, transparency, price discovery, fairness, and integrity as major concerns surrounding dark pools.¹³⁷

Acknowledging the limited activity in dark pools and little to no evidence that dark liquidity was having a negative impact on the Canadian capital market,¹³⁸ the CSA and IIROC still approved regulatory amendments regarding dark pools.¹³⁹ These amendments included requiring price improvement over the visible market price for orders executed in dark pools¹⁴⁰ and giving visible orders priority over dark orders on the same marketplace.¹⁴¹ They also set limits on sending Canadian orders to the

133. “The Investment Industry Regulatory Organization of Canada is the national self-regulatory organization which oversees all investment dealers and trading activity on debt and equity marketplaces in Canada.” *About IIROC*, IIROC, <http://www.iiroc.ca/about/Pages/default.aspx> (last visited Nov. 18, 2013).

134. “The Canadian Securities Administrators (CSA) is an umbrella organization of Canada’s provincial and territorial securities regulators whose objective is to improve, coordinate and harmonize regulation of the Canadian capital markets.” *About CSA*, SECURITIES-ADMINISTRATORS.CA, <http://www.securities-administrators.ca/aboutcsa.aspx?id=45&linkidentifier=id&itemid=45> (last visited Nov. 18, 2013).

135. See JOINT CAN. SEC. ADMIN./INV. INDUS. REGULATORY ORG. OF CAN., DARK POOLS, DARK ORDERS, AND OTHER DEVELOPMENTS IN MARKET STRUCTURE IN CANADA (2009) [hereinafter CANADIAN SECURITIES ADMINISTRATOR DARK POOL PAPER].

136. Dark pool trading in Canada accounted for only two percent of the total volume at the time of the regulation. Volume has since rebounded and now accounts for approximately five percent of the total volume of shares traded in the Canadian markets. *Id.* at 139; News Release, Canadian Sec. Admin. & Inv. Indus. Regulatory Org. of Canada, Update on Forum to Discuss CSA/IIROC Joint Consultation Paper 23-404 “Dark Pools, Dark Orders and Other Developments in Market Structure in Canada” and Next Steps (May 28, 2010); INV. INDUS. REGULATORY ORG. OF CAN., ANNUAL REPORT 2013-2014 4 (2014).

137. CANADIAN SECURITIES ADMINISTRATOR DARK POOL PAPER, *supra* note 135.

138. JOINT CANADIAN SEC. ADMIN./INV. INDUS. REGULATORY ORG. OF CANADA, STAFF NOTICE 23-311: REGULATORY APPROACH TO DARK LIQUIDITY IN THE CANADIAN MARKET (2011).

139. One independent study found that the ten percent dark trading volume that Canada experiences actually improves liquidity, lowers quotes, and that dark trading is “economically meaningful”. SEAN FOLEY AND TĀLIS J. PUTNIŅŠ, *Should We be Afraid of the Dark? Dark Trading and Market Quality*, CAPITAL MARKETS CRC 3 (2013); Press Release, CSA and IIROC Announce The Implementation of Dark Liquidity Framework in Canada (Apr. 13, 2012).

140. Exemptions include orders above fifty trading units (typically 5,000 shares), orders that have a value of \$100,000 or more, and “if entering the order based on market conditions would not be in the interest of the client.” INV. INDUS. REGULATORY ORG. OF CAN., PROVISIONS RESPECTING DARK LIQUIDITY 11 n.13 (2012).

141. *Id.* at 12.

United States that trade in dark pools.¹⁴² Within months, these regulations, which took effect in October 2012, reduced dark pool trading in Canada by almost a third.¹⁴³

B. AUSTRALIA

Following Canada's lead, the Australian Securities and Investments Commission (ASIC)¹⁴⁴ implemented regulations for dark pools, including a better price provision.¹⁴⁵ Citing concerns over an increased proportion of liquidity being diverted from pre-trade transparent orders to dark pools, which could result in wider spreads and worse prices for investors, ASIC proposed to establish regulations that would preserve the pre-trade price formation process.¹⁴⁶

Although ASIC acknowledged that the situation in the Australian markets had not reached a point where price formation was being harmed, they expressed concern about the speed at which dark liquidity was increasing and the impact of a potential shift of liquidity from light to dark venues.¹⁴⁷ ASIC adopted amendments to its Market Integrity Rules which focused on maintaining dark pools for institutional investors with large orders while maximizing pre-trade transparency in the public markets and prioritizing lit orders over dark orders.¹⁴⁸ The adoption included meaningful price improvement for dark orders over the displayed price and setting a minimum size for dark orders.¹⁴⁹ Like Canada, the intention of the rule was to push all dark trading done at the national best bid and offer price to the lit markets and out of the dark, therefore requiring trades done without pre-trade transparency to have a "good reason" not to be transparent.¹⁵⁰

142. *Id.* at 11 n.13; Nicholas Thadane, *Policing the Dark: Likely Impacts of New Canadian Regulation*, THE BLOTTER (Nov. 30, 2013), http://itg.com/news_events/insights/Blotter_Thadane_042512.pdf.

143. Popper, *supra* note 99.

144. ASIC is Australia's independent Commonwealth Government regulatory body set up under the Australian Securities and Investments Commission Act (ASIC Act). The ASIC Act requires ASIC, among other things, to "maintain, facilitate and improve the performance of the financial system" and "promote confident and informed participation by investors . . . in the financial system." *Our Role*, AUSTL. SEC. & INV. COMM'N, <http://www.asic.gov.au/asic/asic.nsf/byheadline/Our+role?openDocument> (last visited Nov. 1, 2013).

145. AUSTL. SEC. & INV. COMM'N, ASIC MARKET INTEGRITY RULES (COMPETITION IN EXCHANGE MARKETS) (2011) [hereinafter MARKET INTEGRITY RULES]; AUSTL. SEC. & INV. COMM'N, AUSTRALIAN EQUITY MARKET STRUCTURE: FURTHER PROPOSALS (2011) [hereinafter FURTHER PROPOSALS], available at <http://asic.gov.au/regulatory-resources/find-a-document/consultation-papers/cp-168-australian-equity-market-structure-further-proposals/>.

146. FURTHER PROPOSALS, *supra* note 145, at 99–100, 104, 117.

147. *Id.*

148. *Id.* at 98; MARKET INTEGRITY RULES, *supra* note 145.

149. MARKET INTEGRITY RULES, *supra* note 145, at 34–40.

150. Ofir Gefen, *What's the Meaning [& Impact] of "Meaningful Price Improvement"?*, THE BLOTTER (June 27, 2013), <http://www.itg.com/2013/06/28/whats-the-meaning-and-impact-of-meaningful-price-improvement/>.

While the volume of trading in dark pools has not fallen after the amendments went into effect, the composition of the trades has changed.¹⁵¹ The volume of block sized trades in dark pools increased from 10% to over 18%, while below block sized trading volume decreased from over 14% down to 10%.¹⁵² Spreads have also been impacted although immaterially.¹⁵³ These outcomes suggest that the amendments had the desired effect of pushing smaller orders back into the lit market but had little impact on market prices.¹⁵⁴

C. EUROPE

Similarly, the European Union is looking at broad market regulation that would encompass dark pools. The Market in Financial Instruments Directive II (MiFID II) has sought to provide more transparency in the dark pool markets.¹⁵⁵ In 2007, the European Union introduced the first set of rules in the original MiFID to “enhance investor protection, improve cross-border market access and promote competition in the financial markets across the EU.”¹⁵⁶ These rules “tore down barriers to competition in trading by ending exchange monopolies, allowing rival venues like dark pools to flourish.”¹⁵⁷ However, while the first MiFID has achieved its objective of increased competition, it has had the unintended consequence of market fragmentation and poor post-trade transparency from trades being spread over various trading venues, including dark pools.¹⁵⁸ Trading in dark pools accounted for nearly 6% of all European shares traded toward the end of 2014 and exceeded \$6.2 billion per day.¹⁵⁹ The new rules implement a mechanism for price improvement on shares traded in the dark similar to rules already implemented in Canada and Australia.¹⁶⁰ Further, MiFID II

151. AUSTL. SEC. & INV. COMM’N, REPORT 331: DARK LIQUIDITY AND HIGH-FREQUENCY TRADING 6 (2013) (noting that dark trading remained close to thirty percent of the total equity share volume and that block sized trading had increased).

152. AUSTL. SEC. & INV. COMM’N, REVIEW OF RECENT RULE CHANGES AFFECTING DARK LIQUIDITY 10 (2014).

153. *Id.* at 11.

154. *Id.*

155. Tom Fairless, *EU Agrees on Tighter Oversight of ‘Dark Pools’*, WALL ST. J. (June 17, 2013), <http://www.wsj.com/articles/SB10001424127887323566804578551611131832702>.

156. Barnabas Reynolds, *A Changing Landscape: The MiFID II Legislative Proposal*, HARV. LAW SCH. FORUM ON CORP. GOVERNANCE & FIN. REGULATION (Nov. 22, 2011, 9:36 AM), <http://blogs.law.harvard.edu/corpgov/2011/11/22/a-changing-landscape-the-mifid-ii-legislative-proposal/>.

157. *European Regulators May Take Swift Action on ‘Dark Pools’*, N.Y. TIMES (Nov. 18, 2009, 5:21 AM), <http://dealbook.nytimes.com/2009/11/18/eu-regulators-may-take-swift-action-on-dark-pools/>.

158. CITY OF LONDON ECON. DEV., UNDERSTANDING THE IMPACT OF MiFID (2010).

159. John Detrixhe, *Dark-Pool Trading Sets Records in Europe as Rules Change*, BLOOMBERG (Dec. 3, 2014), <http://www.bloomberg.com/news/articles/2014-12-03/dark-pool-trading-sets-records-in-europe-as-rules-change>.

160. Council Regulation 600/2014, 2014 O.J. (L 173) 84, 102 (implementing a midpoint price requirement).

implements a volume cap of 4% on any single security on a single market and an 8% volume cap in a single stock across all venues in the European Union.¹⁶¹ Final technical requirements are expected in mid-2015 and will apply to firms in 2017.¹⁶²

IV. U.S. APPROACH

Until recently, dark pools and ATSs in general have largely flown under the regulators' radar. While regulations such as Regulation ATS and NMS have focused on ATSs and have helped to increase their influence in the markets, few have focused on curtailing their trading or increasing their transparency.¹⁶³ Litigation and enforcement regarding dark pools have revolved around cases where the pools were not dark enough and either revealed client information or traded against them.¹⁶⁴ But recent events, including the flash crash,¹⁶⁵ have brought renewed concentration on how dark pools operate.¹⁶⁶ Since dark pools are only required to report trades that are actually executed and little is known about how they operate or who executes the trades, there is concern about investor protections.¹⁶⁷ These secretive aspects, as well as heavy lobbying by exchanges and regulation being adopted around the world, have brought dark pools to the headlines.¹⁶⁸

A. EARLIER PROPOSALS

In its approach to dark pool regulation, the SEC has tried to strike a balance between promoting a transparent, fair, and efficient market system while fostering competition and innovation between market participants.¹⁶⁹ Unlike international efforts, the SEC's proposals have focused less on

161. *Id.* at 103.

162. *Id.* at 104, 148.

163. Unger, *supra* note 68 (noting that dark pools are largely out of the regulatory control).

164. See, e.g., *SEC Charges Boston-Based Dark Pool Operator For Failing To Protect Confidential Information*, SEC NEWS DIGEST (Oct. 3, 2012), <http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171485204#.VMK9GIrF8WU>.

165. CFTC & SEC, FINDINGS REGARDING THE MARKET EVENTS OF MAY 6, 2010 1 (2010).

On May 6, 2010, the prices of many U.S.-based equity products experienced an extraordinarily rapid decline and recovery. That afternoon, major equity indices in both the futures and securities markets, each already down over 4% from their prior-day close, suddenly plummeted a further 5-6% in a matter of minutes before rebounding almost as quickly.

Id.

166. Shapiro, *supra* note 115.

167. See generally *id.* (remarks on dark pools); *How Dark Are Dark Pools?—Part 2*, TABB FORUM (Apr. 24, 2013), <http://tabbforum.com/opinions/how-dark-are-dark-pools-part-2>.

168. See Eleni Himaras, *U.S. Should Watch Australia Dark Pool Laws, Schapiro Says*, BLOOMBERG (Nov. 1, 2013), <http://www.bloomberg.com/news/2013-11-21/u-s-should-watch-australia-dark-pool-laws-schapiro-says.html>; Patterson, *supra* note 1.

169. Brigagliano, *supra* note 122.

limiting the use of dark pools and have instead focused on improving data transparency, providing fairer access, and limiting market fragmentation.¹⁷⁰

The SEC's first proposals sought to enforce the regulation of dark pools by addressing pool operator practices that create a "two-tiered" market, which allowed some investors access to more information than others.¹⁷¹ It also hoped to increase market transparency by lowering the trading volume threshold for publicly displayed quotes set in Regulation ATS.¹⁷² Under Regulation ATS, dark pools are not required to display their orders publicly unless the trading volume of a particular stock reaches five percent or more of average daily trading volume.¹⁷³ The SEC proposed to lower the threshold to 0.25%,¹⁷⁴ which would have pushed dark orders into the public for all except the most highly liquid stocks.¹⁷⁵

Additionally, the SEC proposed to eliminate actionable "Indications of Interest" (IOI).¹⁷⁶ IOIs allow one dark pool to signal to other pools or investors with access that there is an order that needs to be filled for a certain stock.¹⁷⁷ This creates liquidity for the pool and its investors, but it also takes away from the public markets by routing orders away from the national market system and into another dark pool.¹⁷⁸ While the quantity, price and even whether the order is a buy or sell is not given, these orders still only allow those with privileged access to take advantage of such a feature and create a "two-tiered system."¹⁷⁹

Lastly, the SEC proposed real-time reporting for ATSS that would identify which venue the trade took place.¹⁸⁰ Although ATSS must report their trades to the public markets, the report does not reveal which ATS executed the trade.¹⁸¹ The SEC hoped this proposal would help investors identify sources of liquidity in particular stocks, allowing them to more easily execute their trades.¹⁸² It would also assure that reliable ATS trading volume was publicly available.¹⁸³

170. *Fact Sheet Strengthening the Regulation of Dark Pools*, SEC (Oct. 23, 2009), <http://www.sec.gov/news/press/2009/2009-223-fs.htm>.

171. *Brigagliano statement*, *supra* note 7, at 59.

172. *Brigagliano*, *supra* note 122.

173. *Id.*

174. Regulation of Non-Public Trading Interest, 74 Fed. Reg. 61208, 61210 (proposed Nov. 13, 2009).

175. *Id.*

176. *Brigagliano*, *supra* note 122.

177. Schumpeter, *supra* note 57.

178. *Brigagliano*, *supra* note 122.

179. Schumpeter, *supra* note 57.

180. *Brigagliano*, *supra* note 122.

181. Sam Mamudi, *Dark Pools Face New FINRA Disclosure Requirements*, BLOOMBERG (Oct 1, 2013), available at <http://www.bloomberg.com/news/2013-10-01/dark-pools-face-new-finra-disclosure-requirements.html>.

182. *Brigagliano*, *supra* note 122.

183. *Id.*

B. RECENT DEVELOPMENTS

While the SEC and other U.S. regulators have been taking a measured approach to regulations by trying to improve transparency and gather information about the pools before they make final decisions, the national stock exchanges are pushing for stricter rules, if not a complete ban on dark pool trading.¹⁸⁴ Although there has been no concrete evidence that dark pools or any other type of ATS are impacting the markets, exchanges continue to express concern.¹⁸⁵ They argue that dark pools shift liquidity away from the lit markets, widen spreads and decrease execution quality. As exchanges, they are required to keep a liquid market that accurately reflects the supply and demand as part of the national market system.¹⁸⁶ But because the dark pools are not required to show trade information until after they are executed, the exchanges argue that the quote on the national market system may not reflect real supply and demand, denying the market participants a clear view of trading interest.¹⁸⁷ Exchanges want the SEC to prioritize the public exchanges over the private ATSs.¹⁸⁸ They support the proposed lowering of the threshold limit for publicly displayed quotes in ATSs to 0.25% of the trading volume.¹⁸⁹

While there are concerns about market integrity and protecting investors, stock exchanges are also concerned with the rise in dark pool trading because of the negative impact dark pools have on their business.¹⁹⁰ Exchanges are no longer private companies. Most are public corporations and competitors to dark pools.¹⁹¹ Stock exchanges are paid for shares traded on their exchanges.¹⁹² The more volume, the more money the exchanges make. The rise of dark pools affects their business model by reducing volume.¹⁹³ While dark pools and other trading systems pay for access to public quotes, which they rely on to price the securities within their own pools, the access fee allowed to be charged is capped.¹⁹⁴

184. Marcinek & Kisling, *supra* note 12.

185. *Id.*; Hatheway statement, *supra* note 11, at 9–10.

186. Securities Act Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 111-12 (amended 1975).

187. Schumpeter, *supra* note 57.

188. Hatheway statement, *supra* note 11, at 62.

189. *Id.* at 62.

190. John McCrank, *Nasdaq Profits Hurt by Facebook IPO Costs, Dark Trading*, REUTERS (Apr. 24, 2013), <http://www.reuters.com/article/2013/04/24/nasdaq-results-idUSL2N0DB0N320130424>.

191. *Dark Pools, Flash Orders, High Frequency Trading, and Other Market Structure Issues: Hearing Before the S. Banking Subcomm. on Sec., Ins., and Inv. of the Comm. on Banking, Hous. and Urban Affairs*, 111th Cong. (2009) 69 [hereinafter *Mathisson statement*] (statement by Dan Mathisson, Head of U.S. Equities Trading, Credit Suisse).

192. Jacob Bunge, *Exchange Executives to Push for Dark-Pool Restrictions*, WALL ST. J. (Apr. 8, 2013), <http://www.wsj.com/articles/SB10001424127887324504704578411451706113258>.

193. McCrank, *supra* note 190.

194. Regulation NMS, 70 Fed. Reg. 37496, 37502 (June 29, 2005).

Dark pool operators contend that they supply a need for institutional investors who are continuously the victims of poaching from HFT.¹⁹⁵ Exchanges have embraced HFT to create liquidity¹⁹⁶ and have given HFT unique access to their quotes and special order types that have allowed them to detect large orders and execute in front of them.¹⁹⁷ The increase in high frequency trading has made it harder for institutional traders to trade in the lit market even when the trade is broken into pieces.¹⁹⁸

Pool operators also point to the fact that exchanges themselves operate dark pools and hide orders just as broker-dealer pools do.¹⁹⁹ The NYSE's own advertisement for its dark service says it trades "over 500 million shares of dark liquidity, daily," which would represent about thirty-seven percent of the exchange's trading volume.²⁰⁰

Rather than lowering the trading volume threshold under Regulation ATS from 5% to 0.25% as proposed by the SEC, some pool operators want the volume threshold limitations removed altogether.²⁰¹ This would have the advantage of increasing competition in the market by giving all investors the opportunity to trade in the dark and reducing the "two-tiered" market information system currently present.²⁰² However, the increased competition could also increase market fragmentation and price discovery issues by further separating buyers and sellers among even more market venues.²⁰³

While the earlier attempts to address dark pool concerns were unsuccessful, the recent adoption of dark pool regulation in the international community, along with a surge in dark trading volume, and heavy lobbying by the national exchanges, has renewed interest in dark pools.²⁰⁴ FINRA has focused recent efforts on bringing more transparency to dark pools.²⁰⁵ Under its amended rules, each ATS is required to report weekly volume and number of securities transactions within the ATS to FINRA.²⁰⁶ ATSs are

195. *Mathisson statement, supra* note 191, at 69.

196. Nathan D. Brown, *The Rise of High Frequency Trading: The Role Algorithms, and the Lack of Regulations, Play in Today's Stock Market*, 11 APPALACHIAN J.L. 209 (2011).

197. PATTERSON, *supra* note 53, at 282.

198. JONATHAN A. BROGAARD ET AL., HIGH FREQUENCY TRADING AND ITS IMPACT ON MARKET QUALITY (2010), available at <http://www.fsa.gov.uk/static/FsaWeb/Shared/Documents/pub/consumer-research/jonathan-brogaard-hft.pdf>.

199. Patterson, *supra* note 1.

200. *Id.*

201. *Mathisson statement, supra* note 191, at 69.

202. *Id.*

203. See generally ISSUES RAISED BY DARK LIQUIDITY, *supra* note 99 (discussing current issues concerning market fragmentation and price discovery).

204. See Himaras, *supra* note 168; Patterson, *supra* note 1.

205. Press Release, FINRA, FINRA Makes Dark Pool Data Available Free to the Investing Public (June 2, 2014).

206. Notice of Filing of Amendment No. 1 and Order Granting Accelerated Approval of a Proposed Rule Change, as Modified by Amendment No. 1, to Require Alternative Trading

also required to obtain a unique identification number.²⁰⁷ Using the ATSS unique identification number, FINRA will publish the total number of shares traded each week in each ATS with the hope on making dark pools more transparent and enhance FINRA's ability to monitor ATS compliance with Regulation ATS.²⁰⁸

While FINRA has focused its attention on making dark pools more transparent, the SEC has stepped up its enforcement efforts. These include heavy fines and penalties on operators for unfair practices, failure to protect confidential trading information, and executing trades at inferior prices to the market price.²⁰⁹ These efforts along with market conditions have forced some dark pools to close and others to consider closing.²¹⁰

V. RECOMMENDATION

Any further approach to dark pool regulation needs to promote greater competition among participants rather than hinder it. While there are clear concerns about the potential for the national market system to be affected by an increase in dark pool trading, there is no clear evidence showing it is currently happening. The SEC should encourage the innovation and competition that has guided their regulatory approach since the 1975 Amendments and in its adoption of Regulation ATS and Regulation NMS.

The adoption of the better price system implemented in Canada and Australia will only make the U.S. stock markets less competitive. Knowing that HFTs will be unable or unwilling to trade in the dark may drive more institutional trades to the dark.²¹¹ This will divide the market further, with

Systems to Report Volume Information to FINRA and Use Unique Market Participant Identifiers, 79 Fed. Reg. 4213 (Jan. 24, 2014).

207. *Id.* at 4214.

208. *Id.* at 4213.

209. The SEC fined UBS \$14.4 million for allowing certain customers to use orders that let them jump ahead of other orders and Liquidnet \$2 million for using subscriber data in sales presentations. FINRA fined Goldman Sachs \$800,000 for failing to prevent orders from being filed at prices inferior to the market. The New York State Attorney General's Office has also started to investigate the practices of dark pools. *In re* Liquidnet, Inc., Securities Act Release No. 9596, 2014 WL 2547522 (Jun. 6, 2014); *In re* UBS Securities, LLC., Securities Act Release No. 9697, 2015 WL 179551 (Jan. 15, 2015); Bradley Hope, *Goldman Agrees to \$800,000 Fine Over Dark Pool*, WALL ST. J. (Jul. 1, 2014), <http://www.wsj.com/articles/finra-fines-goldman-dark-pool-trading-unit-800-000-1404224624>; Jonathan Stempel, *New York Seeks to Expand Barclays 'Dark Pool' Lawsuit*, REUTERS (Jan. 21, 2015), <http://www.reuters.com/article/2015/01/21/us-barclays-newyork-darkpool-lawsuit-idUSKBN0KU2KA20150121>.

210. John McCrank, *Exclusive: Wells Fargo to Shut its 'Dark Pool' as Demand Falls*, REUTERS (Oct. 16, 2014), <http://www.reuters.com/article/2014/10/16/us-wells-far-darkpool-idUSKCN0I52WA20141016>; Devika Krishna Kumar & Tanvi Mehta, *Goldman Sachs May Close Dark Pool Sigma X*, REUTERS (Apr. 8, 2014), <http://www.reuters.com/article/2014/04/08/goldmansachs-darkpool-idUSL3N0N04V320140408>.

211. Luminex, a dark pool created by some of the top asset management firms in the United States, will require trades to be executed in block sizes. This will effectively keep high-frequency trading and retail investors out of the dark pool. If trading costs are lower than exchanges, a larger quantity of institutional trading activity will move to the dark pool.

one segment of institutional investors trading in the dark and retail and high-frequency traders trading on exchanges.

Rather than curtailing dark pools, regulators need to focus on fair access throughout the markets. Dark pools were borne out of the need of institutional traders to shield their trading activity from predatory trading practices made available by advances in technology. Any solution that does not address these concerns will only be a patch for a larger problem.

Enforcement action should continue to be taken against pool operators who violate price rules of Regulation NMS or discriminate against users of the pool. But rather than trying to isolate dark pools, regulations should encourage more connectedness between the pools and exchanges. The SEC should revise the Regulation ATS access rule to prohibit dark pools from discriminating against who they trade with and set up a system that links multiple trading centers and provides information to the public.

CONCLUSION

Through Regulations ATS and NMS, the SEC has fostered innovation in the stocks markets while recognizing the need to protect fair and efficient access for all investors. While the international community has looked to limit the use of dark pools, the SEC has thus far taken a cautious approach. Any attempt to further regulate dark pools without fully knowing the consequences is premature and ill-advised. While enforcement of access and pricing rules should continue, a broader view of the market implications needs to be taken. Therefore, the SEC's focus should be on fair access throughout the markets and not just dark pools.

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John Detrixhe & Sam Mamudi, *Fidelity-BlackRock Group Unveils Dark Pool for Stock Trades*, BLOOMBERG (Jan. 20, 2015), <http://www.bloomberg.com/news/articles/2015-01-20/fidelity-blackrock-group-prepares-dark-pool-for-big-stock-trades>. See also REVIEW OF RECENT RULE CHANGES, *supra* note 152 (discussing the increase in block size trades and the decrease of smaller lots after the implementation of rules designed to limit dark pool trading).

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