

NOTES

The Securities Black Market: Dark Pool Trading and the Need for a More Expansive Regulation ATS-N

INTRODUCTION: STEPPING INTO DARK POOLS	311
I. BACKGROUND: DARK POOLS DEFINED.....	314
A. <i>Regulation ATS and the Dark Pool Loophole</i>	315
B. <i>General Dark Pool Platform Structure</i>	318
1. Sell-Side Firms Versus Independent Providers	319
2. Trade Frequency.....	320
3. Party Trading	321
4. Order Facilitation.....	321
C. <i>Dark Pool Trading, Generally: Beneficial or Too Risky?</i>	323
D. <i>Competition, Ancillary Services, and the Need for SEC Intervention</i>	326
II. PREVIOUSLY PROPOSED SOLUTIONS TO THE ISSUES SURROUNDING DARK LIQUIDITY AND THEIR SHORTCOMINGS	330
A. <i>Adjusting the Daily Trade Volume Threshold</i>	330
B. <i>Public Disclosure of Indications of Interest</i>	331
C. <i>Real Time Back-End Disclosure</i>	332
III. RECONCILING THE DARK WITH THE LIGHT	334
A. <i>Taking ATS-N a Step Further</i>	334
1. Quality Trade Facilitation Report	335
CONCLUSION.....	336

INTRODUCTION: STEPPING INTO DARK POOLS

In early 2016, Barclays and Credit Suisse found themselves in the midst of a settlement with the Securities Exchange Commission

(“SEC”) over dark pool activity for a combined total of \$154.3 million.¹ Barclays alone settled for \$70 million as a result of its misrepresentations regarding the methods used for monitoring high-frequency trade (“HFT”) activity within its dark pool, “Barclays LX.”² As part of its settlement, the London-based bank also agreed to the implementation of an independent third-party consultant to review how the firm manages certain aspects of its dark pool business.³ Credit Suisse—who also faced charges of misrepresentation regarding the use of its dark pool, “Crossfinder,” to facilitate internal order flow—settled for \$84.3 million.⁴ After the settlement, New York Attorney General Eric Schneiderman stated, “These cases mark the first major victory in the fight against fraud in dark pool trading that began when we first sued Barclays: coordinated and aggressive government action, admissions of wrongdoing, and meaningful reforms to protect investors from predatory, high-frequency traders.”⁵ Schneiderman later noted, “We will continue to take the fight to those who aim to rig the system and those who look the other way.”⁶

A dark pool, a form of Alternative Trading System (“ATS”), is a private securities trading platform that—unlike public exchanges such as the New York Stock Exchange—allows participants to execute large block trades with delayed public disclosure.⁷ As neither party in a dark market transaction is trading on the public, or “lit,” market or knows the identity of its counterparty, dark market trades allow participants to trade anonymously and keep trade strategies from competitors.⁸ Further, because dark market trades do not have to be publicly disclosed in real time, the price of a given security will, theoretically, stay relatively stable as the order is filled.⁹ As such, dark market trades are said to have “reduced market impact,” which generally results in more favorable overall pricing to buyers and sellers.¹⁰ While a number of larger banking institutions advertise “dark pool” services, these

1. See Keri Geiger & Sam Mamudi, *Barclays, Credit Suisse Agree to Dark Pools Settlements*, BLOOMBERG (Jan. 31, 2016, 9:46 PM), <http://www.bloomberg.com/news/articles/2016-01-31/barclays-credit-suisse-to-pay-154-3-million-in-dark-pool-deals> [<https://perma.cc/924H-JDG5>].

2. *Id.*

3. *Id.*

4. *Id.*

5. *Id.*

6. *Id.*

7. *People ex rel. Schneiderman v. Barclays Capital Inc.*, 1 N.Y.S.3d 910, 911–12 (N.Y. Sup. Ct. 2015).

8. *See id.*

9. *Id.* at 912.

10. *Id.*

services vary widely in size and nature.¹¹ Furthermore, these relatively new financial instruments have little recognition within the law. Despite the regulatory issues posed by the mortgage crisis in 2008, the Dodd-Frank Wall Street Reform and Consumer Protection Act passed in 2010 does not directly address dark pool trading within U.S. equity markets.¹² While dark pools offer a number of benefits to both retail and institutional investors, including the supposed ability to hedge against HFT arbitrage, a number of informational and regulatory gaps brought about by dark pools' statuses as ATSS present issues to the Securities Exchange Act of 1934's goal of "protecting investors, maintaining fair, orderly and efficient markets, and facilitating the formation of capital."¹³

To address these regulatory gaps, this Note proposes that the SEC expand its proposed regulations by issuing quality trade facilitation ratings that give existing and prospective dark pool participants meaningful comparison criteria upon which to evaluate the effect different services have on quality execution. Such a rating would, for example, provide investors with insight as to how well a particular pool facilitates trades relative to the market given order size, order type, and services offered, among other criteria. In a sense, this system could be considered a more expansive version of the SEC's proposed Regulation ATS-N. Such a system would not only reduce the negative trading effects associated with dark pools, but would also limit missed liquidity,¹⁴ foster predictability, prevent against market manipulation, promote best execution, cure information asymmetry, and reduce barriers to entry to smaller investors. Part I explains how dark pools operate, describes how pools vary in size, form, and function, and lists the potential costs and benefits to dark market liquidity, generally. Part II analyzes previously proposed solutions to dark pool regulation and their accompanying drawbacks. Part III proposes an independent quality trade facilitation rating system as a solution to the problems facing the dark market.

11. *Id.*

12. See 12 C.F.R. § 242 app. A (2013).

13. 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, 46 (2013); see 15 U.S.C. § 78f (2012). These informational and regulatory gaps include delayed public disclosure, lack of execution quality and transparency for dark pool participants, and an inability for traders to accurately assess available liquidity. See Eng, *supra*, at 45–46.

14. Liquidity refers to the extent to which a security can be bought or sold and converted to cash.

I. DARK POOLS DEFINED

As mentioned, dark pools vary in size, form, and function. Generally, however, a dark pool is an ATS, or private securities exchange platform, that directly links buyers and sellers looking to trade large blocks of securities with reduced market impact.¹⁵ There are currently more than forty ATSs registered with the SEC, with Credit Suisse's "Crossfinder" being the largest as of September 2015.¹⁶ Crossfinder alone executed more than forty-seven million trades in the third quarter of 2015, involving over 8.5 million shares at an average trade size of 181.¹⁷ While such trades provide various benefits—including more favorable pricing than the lit market and concealing trade strategies from other competitive institutions—they come at the cost of decreased transparency.¹⁸ Critics of dark pool trading argue that it reduces lit market transparency and efficiency, decreases liquidity, impairs price movement, and creates conflicts of interest between brokers and dark pool providers.¹⁹ In an attempt to balance such countervailing concerns, these critics and the SEC have proposed a number of solutions that vary in form and complexity, including the real time disclosure of dark market trades and limiting the size of such trades.²⁰ The practicality and long-term effects of such proposals, however, remain untested and subject to speculation. Ultimately, issuing quality trade facilitation ratings seems to be a more effective way of balancing regulatory and investment-based trepidation.

To more effectively understand this Note's solutions and how added front-end disclosure is a superior solution to the current regulatory scheme, this Part provides a historical overview of dark pool evolution, a discussion of the various dark pool platform structures, and the risks and benefits that come with dark market liquidity, generally.

15. See *Schneiderman*, 1 N.Y.S.3d at 912.

16. See *ATS Transparency Data Quarterly Statistics, Third Quarter of 2015, All ATS Stocks*, FINRA (2016), <http://www.finra.org/industry/ats/ats-transparency-data-quarterly-statistics> [<https://perma.cc/AS83-K2B7>].

17. *Id.*

18. Christopher Mercurio, *Dark Pool Regulation*, 33 REV. BANKING & FIN. L. 69, 70 (2013).

19. *Id.*

20. 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, 1043 (2010).

A. Regulation ATS and the Dark Pool Loophole

In the mid-1900s, the market for securities was highly fragmented.²¹ Market fragmentation, or a lack of a centralized information and trade feed, resulted in rampantly inefficient prices that hindered traders' prospects for best execution.²² Best execution, in simplest terms, is the most favorable price for a customer at the time a stock is traded.²³ In response, Congress amended the Securities Exchange Act of 1934 (the "Exchange Act") in 1975 to charge the SEC with the goal of creating a unified securities market, thus promoting price stability, investor confidence, and general market efficiency.²⁴ This nationalized, uniform system for securities trading eventually became known as the National Market System.²⁵ The rationale of such a system was that if all investors could see all current quotes and route to the venue offering the best price, the market would be protected from inefficiency and opportunistic behavior.²⁶ Although the marketplace would "still be fragmented where different trading venues compete for order flow, best execution would be secured by routing to the venue with the best pricing."²⁷

Despite the creation of the National Market System, Regulation ATS ("Reg ATS"), enacted in 1998, was created to allow a small number of trades to be executed on platforms not subject to the strict regulatory requirements for public exchange formation under section 6 of the Exchange Act.²⁸ Further, Regulation NMS ("Reg NMS"), enacted in 2005, was created to help the regulatory scheme adapt to shifts in technology and market complexity.²⁹ However, Reg NMS, Reg ATS, and

21. *See In re Barclays Liquidity Cross & High Frequency Trading Litig.*, 126 F. Supp. 3d 342, 348 (S.D.N.Y. 2015).

22. *Id.*

23. In other words, best execution is a purchase at the lowest possible price for a buyer or a sale at the highest possible price for a seller. *See Eng et al.*, *supra* note 13, at 46.

24. 17 C.F.R. § 240 (2015); *Eng et al.*, *supra* note 13, at 46.

25. *Eng et al.*, *supra* note 13, at 46.

26. *Id.*

27. *Id.*

28. Hatch, *supra* note 20, at 1036. Becoming a national securities exchange under section 6 of the Exchange Act is comparatively much more involved. The process usually takes years of submitting detailed information regarding how bids are accepted and how trades are processed. Drafts of these processes are submitted to the SEC and posted for public comment. In addition to the stricter reporting requirements of national exchanges regarding quotes, bids, and market participants, the method of a given exchange's execution falls subject to more public and regulatory scrutiny. The high-risk nature of the securities industry has made for an ever-changing regulatory scheme, and improved regulation over time has resulted in heightened levels of accountability, fraud monitoring, and general investor protection. Currently, however, the process for dark pool formation under Regulation ATS is not nearly as stringent or disciplined. *See id.* at 1048–49.

29. *Eng et al.*, *supra* note 13, at 46.

the Exchange Act contained subtle loopholes that allowed for trades to be executed without public price disclosure.³⁰

Effectively, section 5 of the Exchange Act and Reg ATS allowed ATSs to execute trades without the need for immediate public disclosure.³¹ Instead of going through the meticulous process of public exchange formation, ATSs could simply register as broker-dealers under section 15 of the Exchange Act.³² Moreover, the public quoting and disclosure requirements of Reg NMS did not apply to ATSs as long as they executed no more than five percent of a particular stock's national daily trading volume.³³ This "loophole" allowed for the inception of the dark liquidity market.³⁴ The concept of keeping transactions "dark" was further advanced by the reporting standards issued by the Consolidated Tape Association ("CTA"), an organization that oversees the dissemination of trade and quote information over a number of public exchanges, including the New York Stock Exchange.³⁵ While ATSs were required to disclose dark market trade parties postexecution, such disclosure could occur weeks after the trade had been completed.³⁶ Still more, the CTA plan did not require ATSs to report exactly when a brokered transaction had occurred.³⁷

The lax disclosure standards brought about by Reg ATS and the CTA allowed institutional traders to keep their trading strategies from competitors and the general public.³⁸ This loophole also created a distinct execution advantage for block trades, as the five percent threshold allowed dark pools to move large amounts of stock, while the CTA reporting standards made it nearly impossible to determine when and which securities were actually trading hands.³⁹ Further, the development of new trading software and more advanced algorithmic trading processes made ATS trades still more profitable to those same

30. Hatch, *supra* note 20, at 1036.

31. *Id.*

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.* Exchanges reporting to the consolidated feed were required to disclose information regarding (1) the price, size, and exchange on which a given trade was executed; (2) the highest and lowest bid offers, including volume information, for a given security; and (3) the National Best Bid Offer. *In re Barclays Liquidity Cross & High Frequency Trading Litig.*, 126 F. Supp. 3d 342, 349 (S.D.N.Y. 2015).

36. Hatch, *supra* note 20, at 1036–37.

37. *Id.* at 1037.

38. *See id.*

39. *Id.*

dark market participants.⁴⁰ Complex computer systems could quickly spread large bulk orders among the growing number of available ATS venues, thus reducing the costs associated with missed liquidity⁴¹ and elevated administrative fees.⁴² More advanced software on both the investor and host sides of the dark market allowed for orders to be matched almost immediately, and automated host execution processes further allowed for reduced transaction costs.⁴³

On one hand, the increasing profitability, perceived informational advantage, and heightened barriers to entry for smaller market participants seemed to disproportionately favor the already large and profitable institutional investors.⁴⁴ Conversely, proponents of dark liquidity argued that ATSS relied largely on smaller investors to supply securities on the sell side.⁴⁵ As such, these proponents argued that smaller investors without access to the dark market still saw the benefit of heightened liquidity and more efficient pricing.⁴⁶

Analysts and the public slowly began to voice concerns regarding dark pool formation and its competition with the lit market in the mid-to late-2000s.⁴⁷ Critics worried that the dark nature of the pools would result in a lack of investor confidence that lit market securities were, in fact, efficiently priced.⁴⁸ Following the financial crash of 2008, public distrust of complex financial products resulted in a call for heightened scrutiny by the SEC.⁴⁹ Mary Schapiro, appointed to head of the SEC in 2009, came to office with a mission to fill any regulatory gaps that had the potential to result in another credit default swap-like setback for the U.S. economy.⁵⁰ Among the complex financial products and services

40. See Yesha Yadav, *The Failure of Liability in Modern Markets*, 102 VA. L. REV. 1031, 1035 (2016) (“Instead of relying on human beings to perform the task of submitting orders, routing them to exchanges, and concluding and completing trades, these functions are instead undertaken by algorithms. Unlike human traders, computers can transact in microseconds, at high volumes, and deploy an enormous reserve of data and quantitative input to inform trading.”).

41. “Missed liquidity” generally refers to a trader’s inability to capitalize on available but unused liquidity hidden in the dark pool network. For a more expansive discussion of missed liquidity, see *supra* note 13 and accompanying text.

42. See Hatch, *supra* note 20, at 1037.

43. *Id.*

44. See *People ex rel. Schneiderman v. Barclays Capital Inc.*, 1 N.Y.S.3d 910, 911–12 (N.Y. Sup. Ct. 2015).

45. See *In re Barclays Liquidity Cross & High Frequency Trading Litig.*, 126 F. Supp. 3d 342, 349–50 (S.D.N.Y. 2015).

46. *Id.*

47. Hatch, *supra* note 20, at 1039.

48. See *id.*

49. *Id.* at 1040.

50. *Id.* at 1040–41. Credit default swaps were among the most notorious financial products that received added attention post-2008. For more discussion about these financial products and their added media attention, see Janet Morrissey, *Credit Default Swaps: The Next Crisis?*, TIME

that caught Schapiro's eye was dark pool trading.⁵¹ While investor protection was at the forefront of SEC concerns, some of the most avid opponents to dark pool formation and use were the securities exchanges themselves.⁵²

The exchanges worried that lax regulatory requirements would eventually result in a loss of overall market share, as dark liquidity offered a number of advantages that could not be achieved in the lit market.⁵³ Conversely, banks and other independent dark pool hosts feared that overregulation could impose debilitating or even fatal effects on an otherwise helpful and profitable financial service.⁵⁴ Though such opponents of overregulation were open to small administrative changes, they strongly advocated market diversity and the ability to freely pursue best execution.⁵⁵

In light of this technical regulatory evolution, and to more fully explain dark pools' function within the financial sector, the next section provides an explanation of how dark pools are practically used and applied.

B. General Dark Pool Platform Structure

Traditionally, securities have been traded on major exchanges or, in light of recent technological advances, on global electronic marketplaces or electronic communications networks.⁵⁶ These more familiar trading venues are often referred to as the "downstairs" market.⁵⁷ However, all major equities markets also employ brokerage firms in the so-called "upstairs market" that look to match hopeful buyers directly with potential sellers, negotiate trade agreements, and, ideally, facilitate best execution.⁵⁸ The upstairs market promotes best execution by allowing block trades to be executed with less price variance and reduced market impact.⁵⁹ Accordingly, upstairs venue hosts make money by facilitating trades and charging a premium (often miniscule in comparison to filling an order on the lit market) to

(Mar. 17, 2008), <http://content.time.com/time/business/article/0,8599,1723152,00.html> [<https://perma.cc/Q7AC-VZ9S>].

51. See Hatch, *supra* note 20, at 1041.

52. *Id.* at 1042.

53. See Eng et al., *supra* note 13, at 43; see also Hatch, *supra* note 20, at 1042.

54. See Hatch, *supra* note 20, at 1042.

55. *Id.* at 1042–43.

56. Eng et al., *supra* note 13, at 42.

57. *Id.*

58. *Id.*

59. *Id.* at 42.

customers for its services, relying on trade volume for profitability.⁶⁰ As such, and with the goal of best execution in mind, the existence of the upstairs market has contributed to the rise of dark pool trading as a primary investment vehicle for institutional investors.⁶¹ These dark pools, however, vary widely in form and function.

1. Sell-Side Firms Versus Independent Providers

First, some dark pools are set up by independent providers, while others are provided by sell-side firms.⁶² Independent providers are entities set up for the sole purpose of running a dark pool.⁶³ In contrast, sell-side hosts, such as Credit Suisse, often act as both an investment bank and a dark pool host.⁶⁴ Technological advances have allowed for increased trade volume for sell-side firms and have made the prospect of matching internal order flow more practicable and lucrative.⁶⁵ At base, sending orders to the downstairs market costs money, as bid/ask spreads and other fees cut into sell-side firm commission margins.⁶⁶ A sell-side firm's ability to directly match its customers' orders against each other and against the firm's own proprietary pool avoids the costs associated with going to market and employing an otherwise costly outside marketmaker.⁶⁷

There are, however, a number of potential concerns with the use of internalized dark pools. Depending on the size or nature of the sell-side firm, questions may arise as to how anonymous such trading really is.⁶⁸ Furthermore, while best execution is a general goal of dark liquidity, investors engaged in a firm's internalized dark pool might not be sufficiently protected from abuse.⁶⁹ In 2011, for example, the SEC

60. *See id.* at 41.

61. *Id.* at 43.

62. *Id.* at 44.

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

67. *Id.*

68. *Id.*

69. *See People ex rel. Schneiderman v. Barclays Capital Inc.*, 1 N.Y.S.3d 910, 911–12 (N.Y. Sup. Ct. 2015); *see also In re ITG Inc. & Alternet Sec. Inc.*, Securities Act Release No. 9887, Exchange Act Release No. 75672, Administrative Proceeding File No. 3-16742 (Aug. 12, 2015); *In re UBS Sec. LLC*, Securities Act Release No. 9697, Exchange Act Release No. 74060, Administrative Proceeding File No. 3-16338 (Jan. 15, 2015); *In re LavaFlow, Inc.*, Exchange Act Release No. 72673; Administrative Proceeding File No. 3-15985 (July 25, 2014); *In re Liquidnet, Inc.*, Securities Act Release No. 9596, Exchange Act Release No. 72339, Administrative Proceeding No. 3-15912 (June 6, 2014); *In re eBX, LLC*, Securities Exchange Act Release No. 67969, Administrative Proceeding No. 3-15058 (Oct. 3, 2012); Joshua Gallu & Nina Mehta, *Pipeline*

brought an enforcement action against Pipeline LLC for falsely advertising that it had “no prop[rietary trading] desk gaming [customer] orders” and that the pool’s trading opportunities, furnished by other customers, were entirely “natural.”⁷⁰ In other words, Pipeline assured its customers that its dark pool was entirely free from internal and proprietary trading.⁷¹ However, one of Pipeline’s affiliates not only engaged in proprietary trading, but also found itself subject to a distinct informational advantage which it used to front-run and profit off other customers’ orders.⁷²

2. Trade Frequency

Second, dark pools differ in cross⁷³ and trade frequency. Some dark pools only look to cross or trade at set intervals, while others look to cross or trade continuously.⁷⁴ Investment Technology Group, for example, crosses at set periods throughout the day, while other pools, such as Liquidnet and Pipeline, cross on a continuum.⁷⁵ The presence of high-frequency traders and the potential for abuse may determine how frequently a host decides to cross or trade. To be sure, HFT firms stand to profit more off platforms that trade continuously, as their superior technology allows them to execute trades faster than the average investor.⁷⁶ Despite its potential for temporary price inefficiency, interval trading puts investors on a level playing field by restricting the speed at which firms can trade.⁷⁷ Firms also look to limit certain investors’ access to their pools as a means of policing abuse.⁷⁸ For example, Liquidnet prevents certain brokers and traders from

Settles with U.S. SEC Over Dark Pool Claims, BLOOMBERG (Oct. 24, 2011), <http://www.bloomberg.com/news/articles/2011-10-24/pipeline-agrees-to-pay-1-million-over-sec-dark-pool-claims> [<https://perma.cc/32MM-LDTG>].

70. Pipeline Trading Sys. LLC, Securities Act Release No. 9271, Exchange Act Release No. 65609 (Oct. 24, 2011) (order instituting administrative and cease-and-desist proceedings); see Gallu & Mehta, *supra* note 69.

71. See Gallu & Mehta, *supra* note 69.

72. See *id.*

73. Crossing a block of stock simply means that the buy and sell orders are matched directly without first routing the order to an exchange or a displayed market. See Eng et al., *supra* note 13, at 44.

74. *Id.*

75. *Id.*

76. See Matthew O’Brien, *Everything You Need to Know About High-Frequency Trading*, ATLANTIC (Apr. 11, 2014), <http://www.theatlantic.com/business/archive/2014/04/everything-you-need-to-know-about-high-frequency-trading/360411/> [<https://perma.cc/M4N5-TMQ3>].

77. See *id.*

78. See Eng et al., *supra* note 13, at 44.

participating in its pool and evicts those who poach or engage in abusive trade practices.⁷⁹

3. Party Trading

Third, dark pools vary in how they allow counterparties to be matched. Some dark pools only allow one-to-one trading, where only one buyer can be matched with only one seller.⁸⁰ Other dark pools allow for one-to-many or many-to-many trading, where multiple buy and sell orders can be matched to facilitate execution.⁸¹ Some argue that limiting the number of counterparties affects both the available liquidity and the type of investor willing to engage in a given pool.⁸² If a host only allows one-to-one trading, for example, the firm must find a matching order before the trade can be executed. Conversely, a host that allows for one-to-many trading can pool smaller orders and provide execution to multiple parties at once. Other commentators argue that aggregating smaller orders to facilitate a sophisticated investor's block trade is really just an extension of the lit market that disproportionately favors larger institutions.⁸³ One might also consider the effect such a limitation could have on efficient market pricing. Aggregating a number of smaller orders to facilitate a dark block trade theoretically has the potential to result in mispricing, information asymmetry, and an inefficiently priced downstairs market.

4. Order Facilitation

Finally, dark pools differ in the types of orders they will allow or facilitate. One of the primary differences is whether the pool provides “committed” or “uncommitted” liquidity.⁸⁴ Uncommitted liquidity allows the involved investor to receive notification that there is an interested counterparty and to choose whether it wants to commit to the trade or not.⁸⁵ However, this ability runs the risk of “pinging” by

79. See Larry Tabb, *Dark Is Hot. But Is it Good?*, WALL STREET & TECH., (Aug. 7, 2006), <http://old.wallstreetandtech.com/dark-is-hot-but-is-it-good/196900251> [<https://perma.cc/4VU5-MEUI>].

80. See Eng et al., *supra* note 13, at 45.

81. See *id.*

82. *Id.*

83. *Id.*

84. *Id.*

85. *Id.*

predatory traders.⁸⁶ A “pinging” order is a small order sent out over a dark pool or other trading medium that is used to detect larger, hidden orders within the pool.⁸⁷ Once a predatory firm detects interest in a given security, it can then replicate the block in its own portfolio, drive the price up, and offer the block for sale at the peak price, resulting in what facially appears to be a degree of arbitrage.⁸⁸

To combat the rising prevalence of predatory trading and market manipulation, some dark pools adhere to committed liquidity.⁸⁹ Committed liquidity executes trades without notice to the investor once the order is placed or sent to the dark pool.⁹⁰ Theoretically, such a procedure hedges against predatory trading activity by not allowing parties to “back out” of their orders, as would be provided for by uncommitted liquidity.⁹¹ However, one must consider predatory firms’ ability to send out small orders whose significance, executed or not, serves the same purpose as a ping. Some firms also engage in what are known as pass-through orders, where a firm will execute internal orders before moving to market.⁹² A sell-side firm, for example, will send orders through its internal securities pool before sending them to outside venues.⁹³

Finally, some dark pools use indications of interest (“IOIs”).⁹⁴ IOIs are anonymously submitted to the dark pool, and if a counterparty exists, further human interaction is necessary to complete the trade.⁹⁵ Some hosts only communicate IOIs within the pool itself, while others

86. See Marketbeat Staff, *Trading in a Dark Pool? Watch for Sharks*, WALL ST. J.: MARKETBEAT (Aug. 18, 2008, 1:06 PM), <http://blogs.wsj.com/marketbeat/2008/08/18/trading-in-a-dark-pool-watch-for-sharks/> [<https://perma.cc/7TXX-2K2M>].

87. *Id.*

88. *See id.*

89. *See* Eng et al., *supra* note 13, at 45.

90. *Id.*

91. *See id.*

92. *Id.*

93. Stanislav Dolgoplov, *Regulating Merchants of Liquidity: Market Making from Crowded Floors to High-Frequency Trading*, 18 U. PA. J. BUS. L. 651, 663 n.40 (2016) (quoting Paul Reynolds, *Shining a Light on Fixed Income Dark Matter*, TABB F. (Sept. 12, 2014), <http://tabbforum.com/opinions/shining-a-light-on-dark-matter> [<https://perma.cc/89DF-RR3P>]):

Compared to the sell-side, the buy-side has an almost zero cost of capital. It has little or no leverage so does not need the same restrictions to protect the taxpayer from failure. As a result the buy-side can provide a far superior price for a large and illiquid order, given the opportunity to price it. Not surprisingly the buy-side lacks the market-maker infrastructure of the sell-side; *see also* Eng et al., *supra* note 13, at 45.

94. Eng et al., *supra* note 13, at 45.

95. *Id.*

distribute IOIs to other pools, creating a trade network.⁹⁶ While human negotiation intuitively has the potential to result in higher transaction costs, such costs are often miniscule in comparison to the marginal costs that accompany executing sizeable block trades on the lit market.⁹⁷

C. Dark Pool Trading, Generally: Beneficial or Too Risky?

While dark pools vary in form and function, the costs and benefits are generally applicable. First, dark pool trading and its delayed disclosure requirements provide investors with the benefit of anonymity.⁹⁸ This anonymity allows pools to execute block trades with reduced market impact while hedging against informational leakage.⁹⁹ If such trades were to be executed on a lit market, the price of the stock would gradually increase or decrease as the order was filled. Dark pools, however, allow a large portion of the shares to be directly and anonymously bought or sold at a predetermined, often more favorable, price for both the buyer and the seller.¹⁰⁰ Such anonymity also allows sophisticated investors to keep their trading strategies private in the face of a competitive modern securities market.¹⁰¹

Second, some dark pools receive the added benefit of insulation from predatory trade activity.¹⁰² As dark pools are not required to immediately disclose execution or trade information, predatory firms are—without pinging orders—less able to front-run dark market trades.¹⁰³ Moreover, firms can eliminate or reduce the effect of pinging orders by employing committed liquidity, a minimum order size, or both.¹⁰⁴ For example, a predatory firm looking to use pinging orders to solicit bid information will not submit orders to a pool that automatically executes only large trades without prior notification.

96. See Mary L. Schapiro, Chairman, U.S. Sec. & Exch. Comm'n, Statement on Dark Pool Regulation Before the Commission Open Meeting (Oct. 21, 2009), <http://sec.gov/news/speech/2009/spch102109mls.htm> [<https://perma.cc/2EFG-7B8M>].

97. See Rhodri Preece, *The Pros and Cons of Dark Pools of Liquidity*, FIN. TIMES (Jan. 6, 2013, 3:32 AM), <http://www.ft.com/cms/s/0/b594f978-54dd-11e2-a628-00144feab49a.html#axzz4HQVaqBQ> [<https://perma.cc/F8QJ-UAYD>].

98. See Eng et al., *supra* note 13, at 45.

99. See *id.* Informational leakage is simply the inadvertent or unintentional public disclosure of a given firm's trade activity. Such leakage can result in higher costs, disclosure of a trade strategy to competitors, and lower profitability. See *id.*

100. *Id.*

101. *Id.* Though such insulation may not be perfect, even modest protection from predatory HFT or algorithmic trading processes is one of the major benefits sought in the dark market. *Id.*

102. See 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, 111 (2014).

103. See *id.*

104. See Eng et al., *supra* note 13, at 45.

Similarly, a pool can opt to trade at set intervals—instead of on a continuum—in order to restrict the speed at which predatory firms can operate, thus putting the pool’s participants on an even technological playing field.¹⁰⁵

While the benefits of dark market liquidity are numerous and apparent, they do not come without costs. The major cost to dark liquidity is lack of information.¹⁰⁶ Dark liquidity at its core involves one party submitting an order without knowledge of an existing or willing counterparty.¹⁰⁷ Accordingly, dark pool participants face the risk of high opportunity costs.¹⁰⁸ In the event an order is placed, the time costs associated with a dark pool order can be significant if the host is unable to find a match.¹⁰⁹ With large block orders, even seemingly insignificant tick movements could result in sizeable lost profits that could have otherwise been achieved on the lit market.¹¹⁰ The opportunity costs associated with dark liquidity thus rely heavily on a host’s ability to fill orders. Further, an inability to negotiate the terms of a block trade, coupled with the inability to see or assess all available liquidity, can result in fewer orders being filled than even similar upstairs market venues.¹¹¹

Moreover, the nature of certain dark pool orders, coupled with the large number of available trading venues, can lead to “missed liquidity.”¹¹² As dark pool participants are unable to assess available liquidity, an investor might look to place smaller orders with a number of different pools, hoping the smaller load will lead to a higher probability of execution.¹¹³ However, the original investor will “miss” available but unused liquidity if just one pool could have filled the entire order and the other utilized pools were without available or willing counterparties.¹¹⁴ Thus, not only will a trader have missed out on valuable liquidity, but it will have also wasted the time and resources necessary for spreading the order across multiple trading channels.¹¹⁵

105. See Marketbeat Staff, *supra* note 86.

106. See Eng et al., *supra* note 13, at 45.

107. See *id.*

108. *Id.*

109. *Id.*

110. *Id.*

111. See Jennifer Conrad, Kevin Johnson & Sunil Wahal, *Institutional Trading and Alternative Trading Systems*, 70 J. FIN. ECON. 99, 99–134 (2003).

112. Eng et al., *supra* note 13, at 46.

113. *Id.*; see also Conrad, Johnson & Wahal, *supra* note 111, at 99–134.

114. See Eng et al., *supra* note 13, at 46.

115. *Id.*

Perhaps the most controversial component of dark trading is the presence and function of HFT activity. HFT differs from traditional trading in that it does not rely on human action to place or cancel a given order.¹¹⁶ HFT uses complex algorithms to submit numerous, rapid bids and offers, creating a short-term market that enables participants to profit off minute price changes or simple price imbalances.¹¹⁷ Thus, firms using algorithm-based trading systems have a distinct advantage over firms that use more conventional trading methods.¹¹⁸ While the malleability of algorithms provides for a number of potential strategies for HFT firms, a recent concept release from the SEC recognized five general tactics utilized in HFT:

- (1) The use of extraordinarily high-speed and sophisticated computer programs for generating, routing, and executing orders;
- (2) use of co-location services and individual data feeds offered by exchanges and others to minimize network and other types of latencies;
- (3) very short time-frames for establishing and liquidating positions;
- (4) the submission of numerous orders that are cancelled shortly after submission; and
- (5) ending the trading day in as close to a flat position as possible (that is, not carrying significant, unhedged positions overnight).¹¹⁹

As explained, the use of high-speed, intelligent computer programs gives HFT firms an advantage over the average investor by allowing them to execute trades and detect market movement faster than a trader using conventional, less costly trading methods.¹²⁰ There are, however, other services that further enhance the advantages of HFT activity. In *In re Barclays Liquidity Cross & High Frequency Trading Litigation*,¹²¹ for example, plaintiffs argued that Barclays's dark pool, Barclays LX, began "catering" its business operations to the needs of HFT firms in exchange for their robust trading volume, despite assurances to retail customers that the pools were a haven from predatory trade activity.¹²² The plaintiffs alleged that Barclays LX provided co-location services¹²³ and proprietary feeds¹²⁴ that were only beneficial to HFT firms, giving them a distinct technological and

116. See Tara E. Levens, *Too Fast, Too Frequent? High-Frequency Trading and Securities Class Actions*, 82 U. CHI. L. REV. 1511, 1526 (2015).

117. *Id.*

118. See Yadav, *supra* note 40, at 1035 (noting that algorithmic trading, generally, is responsible for "around 50 to 70% of equity volume and an estimated 60% of all trading in futures markets in the United States").

119. Levens, *supra* note 116, at 1527 (citing Securities and Exchange Commission, Concept Release on Equity Market Structure, 75 Fed. Reg. 3594, 3606 (2010)).

120. *Id.* at 1529.

121. 126 F. Supp. 3d 342, 352, 353 (S.D.N.Y. 2015).

122. *Id.*

123. For definition, see *infra* note 159 and accompanying text.

124. For definition, see *infra* note 149 and accompanying text.

informational advantage over other investors engaged in the pool.¹²⁵ Despite such advantages, certain commentators, including the SEC, have acknowledged that HFT can, in fact, benefit the market by creating large amounts of liquidity and reducing transaction costs.¹²⁶ Liquidity also creates a more efficient public market, and more efficiency provides an informational benefit to ordinary investors.¹²⁷ As such, HFT activity, whether seen as a benefit or risk to the dark liquidity market, is significant when looking to potential solutions to dark pool regulation.

Finally, investors may be priced out of this trading system. As alleged by the plaintiffs in *In re Barclays Liquidity*,¹²⁸ many of the services that make dark liquidity valuable are only available or valuable to the firms that can afford them.¹²⁹ Thus, the costs associated with general research, algorithmic trading, preferred proprietary information services, and co-location services create a barrier to entry for smaller investors. As dark pools vary in form and function, an investor without the resources to compete with larger, wealthier firms must spend added time and money researching a potential dark pool to ensure its orders will not fall subject to predatory trading activity. Some have even expressed concern that the profitability of dark pools has the potential to result in reduced liquidity for the retail investor at large.¹³⁰ In the face of market manipulation claims and the dark market's potential for abuse, regulators began grappling with the need for a solution that protected investors without stripping the dark market of its perceived value.

D. Competition, Ancillary Services, and the Need for SEC Intervention

In addition to technical advancements in the dark market, dark liquidity's growing popularity created an increasingly competitive market leading up to the crisis in 2008.¹³¹ At first, an expanding dark liquidity market resulted in dark market fragmentation. However, a dark pool host's profitability depends largely on trade volume.¹³² As Regulation ATS made dark pool formation relatively simple, an

125. *In re Barclays*, 126 F. Supp. 3d at 353.

126. *Id.* at 350; *see also* Regulation NMS, 70 Fed. Reg. 37,496, 37,500 (June 29, 2005) ("Short-term traders clearly provide valuable liquidity to the market.").

127. *In re Barclays*, 126 F. Supp. 3d at 352.

128. *Id.*

129. *Id.*

130. Hatch, *supra* note 20, at 1039.

131. *See id.* at 1040.

132. *In re Barclays*, 126 F. Supp. 3d at 352.

increasingly fragmented market resulted in less counterparty availability and, thus, less volume being executed by individual pools.¹³³ Such an increase in competition and dispersion of trade volume forced dark pool hosts to devise new products and services to make their particular exchanges more attractive to outside investors.

First, in responding to this increased competition, dark pool hosts promoted the use of IOIs to facilitate matches between dark pool participants.¹³⁴ As previously stated, after an order was placed and in the event a counterparty was located, the host used IOIs to notify the parties of the match without requiring immediate execution.¹³⁵ As noted, Schapiro and a large sector of the investing public recognized IOIs as the functional equivalent of public price quotes.¹³⁶ Though IOIs varied in form, function, and content, they all constituted a notification to the involved dark market participants that someone was looking to trade in a given security.¹³⁷ Further, not all IOIs disclosed the counterparty or whether the security was being sold or purchased, thus serving to maintain the benefits of anonymity and delayed disclosure.¹³⁸ Many IOIs did, however, disclose price information and how said price fared relative to the National Best Bid and Offer (“NBBO”), or the best price offered in any market for a given security.¹³⁹ The ability to negotiate and receive IOI notifications resulted in increased liquidity and trade volume for a number of dark pool hosts, but questions as to the fairness of such delayed disclosure remained.¹⁴⁰

Second, dark pools found increasing popularity with broker-dealers whose customers provided ready access to large pools of securities.¹⁴¹ After Regulation NMS, and in an effort to achieve best execution, almost all major investment banks increased efforts to execute trades without the use of the public market.¹⁴² Outside trading venues, including dark pools, gave investors better prices and improved total firm profitability.¹⁴³ Delayed disclosure meant more time for firms to find the best price on the public market and through other outside

133. See Hatch, *supra* note 20, at 1046.

134. See *id.* at 1037.

135. Eng et al., *supra* note 13, at 45.

136. *Id.*

137. See Hatch, *supra* note 20, at 1037–38.

138. *Id.* at 1038.

139. *Id.*

140. *Id.*

141. See *id.*

142. *Id.*

143. *Id.*

venues.¹⁴⁴ For larger broker-dealers that also provided dark pool services, securities reserves were a convenient source of liquidity in facilitating counterparties and boosting overall trade volume.¹⁴⁵ While the benefits of directing internal order flow to a broker-dealer's own dark pool remained subject to conjecture, calls for more effective means of monitoring abuse by dark pool hosts served as a staple in the criticisms that arose post-2008.¹⁴⁶

Third, hosts implemented “enhanced” or “proprietary” data feeds.¹⁴⁷ These proprietary data feeds included much of the same information securities exchanges were required to send to the consolidated feed post-Reg NMS, but they often included additional detailed information about the pool's internal trade activity.¹⁴⁸ Further, data from the proprietary feeds was sent directly to the feed's “subscribers,” resulting in a distinct informational advantage.¹⁴⁹ Technically, a host is not permitted to transmit the information from the proprietary feed any earlier than it transmits the information to be processed by the consolidated tape.¹⁵⁰ However, because the information being sent to subscribers of the proprietary data feed did not have to be processed, sending the information through both channels simultaneously still provided the subscribers with the advantage of time.¹⁵¹

Fourth, hosts provided select customers with complex and sophisticated order types.¹⁵² An order type is a preexisting command that allows traders to tell venues how to handle their bids and offers to sell stock.¹⁵³ For example, a limit order—or a command for an exchange to buy a stock at a decided price—constitutes just one of the “hundreds” of available complex order types.¹⁵⁴ The more complex the order type, the more factors that go into deciding when a given trade is to be

144. *Id.* at 1036.

145. *See id.* at 1038.

146. *Id.*

147. *See In re Barclays Liquidity Cross and High Frequency Trading Litig.*, 126 F. Supp. 3d 342, 351 (S.D.N.Y. 2015).

148. *Id.*

149. *See id.*; N.Y. Stock Exch. LLC & N.Y.S.E. Euronext, Exchange Act Release No. 34-67857, 2012 WL 4044880, at *8 (Sept. 14, 2012) (requiring the Exchanges to take “reasonable steps to ensure . . . that . . . data relating to current best-priced quotations and trades through proprietary feeds [are released] no sooner than . . . data [sent] to the . . . Processor” for integration into the consolidated feed).

150. *In re Barclays*, 126 F. Supp. 3d at 351.

151. *Id.*

152. *Id.* at 351–52.

153. *Id.*

154. *Id.* at 352.

executed.¹⁵⁵ An order type discussed in *In re Barclays* called a “hide-and-light” order, for example, is where a given order will not appear as a bid or offer on an exchange until the stock reaches a particular price, at which point the order “lights” and jumps the queue of investors waiting to trade.¹⁵⁶ This order type offers a distinct advantage because, where most investors join the queue as they place orders with a particular venue, hide-and-light orders immediately move to the front of the line, ensuring a form of best execution.¹⁵⁷ Consequently, investors without access to these types of complex order types often receive a worse price for their securities, and thus, less profitability.¹⁵⁸

Finally, certain hosts provided a service called “co-location.” Co-location allows traders to install their servers at or near the servers used to execute trades on a given trade venue.¹⁵⁹ This practice allows for traders using advanced trading hardware and software to shave fractions of a second off a given trade.¹⁶⁰ When combined with algorithmic trading, co-location services allow advanced traders to profit off of even smaller price discrepancies.¹⁶¹ As is the case with proprietary feeds, co-location services offer distinct advantages to a select group of investors with the necessary financial and technological means.¹⁶²

As the SEC requires approval for certain services such as proprietary data feeds, co-location, and complex order types, it should be noted that there are some perceived benefits to these special products and services.¹⁶³ Arguably, proprietary feed information can be properly disseminated without resulting in an informational deficiency for nonmembers. Complex order types that are not of use or interest to smaller investors might help promote liquidity and best execution. Certainly, similar arguments could be made for the use of co-location services. However, even with SEC approval, certain dark pool customers, such as those involved with Barclays LX and Crossfinder, have still found themselves subject to fraud and manipulation.¹⁶⁴

155. *Id.*

156. *Id.*

157. *Id.*

158. *See, e.g.*, UBS Sec. LLC, Securities Act Release No. 9697, Securities Exchange Act Release No. 74060, 2015 WL 179551, at *2 (Jan. 15, 2015).

159. *See In re Barclays*, 126 F. Supp. 3d at 351.

160. *Id.*

161. *Id.*

162. *Id.*

163. *See, e.g.*, Exchange Act Release No. 34-59606, 74 Fed. Reg. 13,293 (Mar. 26, 2009).

164. *Id.*

II. PREVIOUSLY PROPOSED SOLUTIONS TO THE ISSUES SURROUNDING DARK LIQUIDITY AND THEIR SHORTCOMINGS

To address the various issues facing dark pool regulation and investor protection, the SEC proposed a number of remedies, including lowering the daily trade volume threshold from five percent, the real time disclosure of IOIs under \$200,000, and the real time disclosure of all trades under \$200,000.¹⁶⁵ However, the net benefits and practicality of these proposals have long been contested.

A. Adjusting the Daily Trade Volume Threshold

First, under Reg NMS, if a pool executes more than the SEC-prescribed five percent threshold of a given stock's daily trading volume, it must provide open access to all market participants.¹⁶⁶ Providing open access would require the given dark pool host to disclose internal price quotes, negating the benefits of anonymity and reduced market impact.¹⁶⁷ Despite this seemingly strict trading volume restriction, some opponents of dark liquidity argue the limit should drop to as low as .25%—a ninety-five percent reduction.¹⁶⁸

To be sure, such a restriction would keep more trading volume on the lit market, thus reducing the potential negative side effects of dark market activity.¹⁶⁹ As mentioned, however, the profitability of a given dark pool relies largely on trade volume. As such, this trade volume restriction has the potential to significantly reduce or eliminate dark pool activity altogether.¹⁷⁰ Opponents of the reduced threshold argue that such a restriction would require hosts to constantly check each security's liquidity against national averages, resulting in inefficiency and administrative difficulty.¹⁷¹ Furthermore, these opponents argue, and the SEC has acknowledged, that extreme limits on the use of dark liquidity might cause investment capital to leave U.S. equity markets.¹⁷² The current, or a higher, trade volume threshold

165. Hatch, *supra* note 20, at 1043.

166. *Id.*; see also Batista, *supra* note 102, at 92–93. This excludes trades that are valued at more than \$200,000. *Id.*

167. Hatch, *supra* note 20, at 1044.

168. *Id.* at 1045.

169. See *id.*

170. See *id.*

171. *Id.*

172. *Id.* at 1046.

might also facilitate best execution by allowing individual pools to route larger offers and orders to other dark pools.¹⁷³

More importantly, in a regulatory regime that does not limit the number of dark pools a given bank or private entity can host, why send order flow to a competitor when one can simply create another internal dark pool?¹⁷⁴ The trade volume threshold thus seems to have an inverse relationship with the number of available dark pools, resulting in fragmentation. The lower the threshold, the more dark pools that will be created, thus resulting in higher research costs, missed liquidity, and higher barriers to entry for investors.¹⁷⁵ As increased fragmentation will result in heightened levels of missed liquidity, such a reduction would also result in more rampant price inefficiency. As the number of venues rises in tandem with dark market popularity, more liquidity will be siphoned from the lit market and lost in a system of dark pool hosts unable to find willing or able counterparties. As such, the lower volume threshold does not seem as though it would fix many of the broader perceived issues with dark market liquidity.

B. Public Disclosure of Indications of Interest

A second proposed solution to the issues surrounding dark liquidity involves making public the content of dark pool IOIs with a value under \$200,000.¹⁷⁶ After being appointed to the head of the SEC, Schapiro acknowledged IOIs as one of the most contentious issues tied to dark pool regulation.¹⁷⁷ IOIs, Schapiro noted, were “functionally and economically similar to public quotes.”¹⁷⁸ Yet, as a result of dark pool trading’s high costs and related barriers to entry, larger dark pool participants found themselves with a distinct informational advantage over those unable to afford dark market participation.¹⁷⁹ Making IOIs public would, in the eyes of the SEC, even the informational playing field for smaller investors.¹⁸⁰ Furthermore, such a lower threshold

173. *Id.* at 1045–46.

174. *See id.* at 1045; *see also* Rachele Younglai, *SEC Proposes to Shed Light on “Dark Pools,”* REUTERS, Oct. 21, 2009, <http://www.reuters.com/article/idUSTRE59K50K20091021> [<https://perma.cc/4G9P-QW58>] (“[T]here is nothing stopping dark pool operators from running multiple dark pools.” (quoting Adam Sussman, director of research for TABB Group Consultants)).

175. *See* Hatch, *supra* note 20, at 1047.

176. *Id.* at 1043.

177. *Id.* at 1041.

178. *Id.*

179. *Id.*

180. *See id.*; *see also* James A. Brigagliano, Co-Acting Dir., Div. of Trading and Mkts., U.S. Sec. & Exch. Comm’n, Keynote Address to the 2009 SIFMA Market Structure Conference (May 20, 2009), <http://www.sec.gov/news/speech/2009/spch052009jab.htm> [<https://perma.cc/BJ8F-T3T9>]

might further protect against predatory trade activity: smaller pinging orders would be made public, while larger orders would retain the dark market's benefits, including anonymity. Despite such protection, public IOIs are not without their drawbacks.

IOIs arguably allow matches to be made more quickly, as the negotiations that come with IOI exchanges result in added transparency and potentially higher order flow.¹⁸¹ Public IOI disclosure would negate many of the dark market's perceived benefits for less frequently traded stocks, as the significance of \$200,000 worth of securities varies depending on the size or market cap of the underlying entity.¹⁸² Further, dark pools have an inherent interest in protecting against IOI abuse.¹⁸³ Dark pools that do not adequately protect their clients' interests will lose favor with dark market players, eventually leading to lower trade volume and shrinking profitability. Given that the Financial Industry Regulatory Authority has already threatened dark pool hosts with potential fines and sanctions for IOI fraud or misrepresentation, heightened disclosure requirements could result in excess regulation and compliance costs.¹⁸⁴ Though IOI disclosure seems to hedge against informational discrepancies and predatory HFT activity, questions remain as to whether such disclosure would deprive the dark market of its intended purpose.

C. Real Time Back-End Disclosure

Finally, the SEC has proposed heightened back-end trade disclosure, requiring the real time release of information on trades under \$200,000.¹⁸⁵ As stated, dark pools are only required to disclose trade information postexecution.¹⁸⁶ Further, the restriction for posting trade information to the consolidation tape required by Reg NMS is lax and lacks specificity.¹⁸⁷ The SEC's third proposed solution to dark liquidity would require hosts to immediately post trades to the consolidation tape along with identifying information about the trade,

("When it comes to managing financial risks, there truly is no substitute for financial products traded in transparent markets capable of generating price discovery that properly incorporates the risk of those products.").

181. Hatch, *supra* note 20, at 1047.

182. *Id.*

183. *Id.* at 1048.

184. *Id.*

185. Batista, *supra* note 102, at 110, 112.

186. *See id.* at 110 ("The SEC's third proposal would require ATSS to report real-time post-trade data.").

187. *See id.* (discussing how real time post-trade data can result in problematic informational leakage).

the parties involved, and the related host for trades, as long as the trade has a value that is less than \$200,000.¹⁸⁸ However, this solution is wanting.

True, this proposal has a number of benefits and would likely meet the least amount of resistance from dark pool proponents.¹⁸⁹ Once a dark pool has executed a given trade, the risk of predatory market movement based on an investor's particular position no longer exists.¹⁹⁰ Heightened back-end disclosure requirements would also help smaller investors more efficiently research the potential liquidity and execution gains to be had in the dark market.¹⁹¹ Further, regulators could more efficiently monitor dark pool activity and protect against abuse or manipulation by hosts.¹⁹² Heightened trade disclosure requirements, coupled with the strict trade volume limitations, might also convince concerned investors that the dark market is of limited significance and that the lit market is safe and at least generally efficient.

However, real time post-trade data reporting creates a risk of informational leakage, which can be used by predatory firms to exploit dark market traders.¹⁹³ These predatory firms may be able to identify the buyers and sellers if a trade is attributed to a particular ATS on the consolidation tape, and such information could then be used to trade against those parties or enter into transactions that would affect the price of the security within the ATS.¹⁹⁴ This issue is especially prevalent in the face of HFT firms.¹⁹⁵ Instead of requiring real time trade disclosure, at least one commentator has suggested that the SEC should allow hosts to wait until the end of the day to report trade activity.¹⁹⁶ By allowing end of day disclosure, investors could avoid predatory trade activity, and the market could still receive updated, useful information about daily trade activity.¹⁹⁷ This commentator further argues that the SEC could even require real time reporting to its office for regulatory purposes while waiting until the end of the day to make such information public.¹⁹⁸

188. See Hatch, *supra* note 20, at 1043.

189. *Id.* at 1044.

190. *Id.*

191. See *id.* (setting reporting standards that would provide useful information to institutional investors).

192. *Id.*

193. Batista, *supra* note 102, at 110.

194. *Id.*

195. *Id.* at 110–11.

196. *Id.* at 111.

197. *Id.*

198. *Id.*

While these proposals come with mixed benefits and drawbacks, the SEC should promulgate a dark market-wide quality trade facilitation rating to allow current and prospective dark market participants to draw meaningful comparisons about the effect different services and trade processes have on execution quality.

III. RECONCILING THE DARK WITH THE LIGHT

There are more than forty active ATSs registered with the SEC, and it is estimated that these forty pools accounted for almost eighteen percent of all trading in National Market System stocks between 2014 and 2015.¹⁹⁹ Some larger ATSs have even facilitated more trades than some of the smaller public exchanges.²⁰⁰ Though factors such as reduced market volatility, attractive fee structures, price improvements, and improved processing speeds have contributed to the rise of these alternative exchange venues, the main contributor to such sustained growth has undoubtedly been the endless search for best execution.²⁰¹ While an end to dark pools altogether seems to be an unrealistic and unwarranted change, the current structure of dark pool transparency is flawed and has resulted in a number of issues that have caught the attention of investors and the SEC alike. SEC implementation of a rating system that gives prospective dark pool participants information on quality trade facilitation would allow those investors to make meaningful comparisons as to the effect such varied services have on execution quality and missed liquidity. As this is a more expansive version of an already-proposed regulation, such a resolution would serve only to afford more protection for dark pool players on a market-wide basis.²⁰²

A. Taking ATS-N a Step Further

While previously proposed solutions to dark pool regulation seem to have a certain degree of merit in assuaging investor concerns regarding liquidity, efficiency, and fairness, many criticisms of dark liquidity remain unresolved. Notably, the SEC announced another proposed amendment to Reg ATS in 2015, known as Regulation ATS-N (“Reg ATS-N”), that seeks to increase front-end reporting standards for

199. Luis A. Aguilar, *Public Statement: Shedding Light on Dark Pools*, U.S. SEC. & EXCHANGE COMMISSION (Nov. 18, 2015), <https://www.sec.gov/news/statement/shedding-light-on-dark-pools.html> [https://perma.cc/S94S-6B6F].

200. *Id.*

201. *Id.*

202. See Geiger & Mamudi, *supra* note 1.

dark pools.²⁰³ SEC Chair Mary Jo White noted in the SEC's press release on Reg ATS-N that "investors and other market participants need more and better information about how alternative trading systems work."²⁰⁴ These disclosures—which would be made public on the SEC's website—would include information regarding trading by the pool and its affiliates on the ATS, available order types, and the ATS's execution and priority procedures.²⁰⁵ The SEC also noted that Reg ATS-N would "allow market participants to better evaluate whether to do business with an ATS, as well as to be better informed when evaluating order handling decisions made by their broker."²⁰⁶ However, ATS-N does not go far enough.

1. Quality Trade Facilitation Report

The SEC should regularly issue a report that rates each host's ability to facilitate quality execution relative to other pools and the open market. As mentioned, missed liquidity occurs when traders spread large bulk orders over multiple pools in hopes that smaller order sizes will result in a higher probability of execution.²⁰⁷ Not only do these traders miss liquidity, but they do so without being able to properly evaluate the effect different services have on execution quality. Here, Reg ATS-N takes a strong first step. If passed, Reg ATS-N will allow participants to compare pools by trade affiliates, available order types, and execution and priority procedures, among other criteria.²⁰⁸ Yet, while hosts must disclose trades following execution, they are not required to disclose the number of unfilled orders submitted to their respective pool, leaving traders unable to properly evaluate the effect such services have on missed liquidity and trade facilitation. Consequently, a pool that receives fewer orders but has a higher rate of quality execution as a result of its services or restrictions might be perceived as offering a less effective trading platform. To allow Reg ATS-N and the market for dark liquidity services to effectively govern, and to cure the current information asymmetry between hosts and traders, the SEC should provide dark pool participants with a meaningful standard against which to compare available pools and

203. Press Release, Sec. & Exch. Comm'n, SEC Proposes Rules to Enhance Transparency and Oversight of Alternative Trading Systems (Nov. 18, 2015), <https://www.sec.gov/news/pressrelease/2015-261.html> [<https://perma.cc/5EJH-SNM7>].

204. *Id.*

205. *Id.*

206. *Id.*

207. Eng et al., *supra* note 13, at 46.

208. Press Release, Sec. & Exch. Comm'n, *supra* note 203.

services. This might, similar to credit ratings, take the form of a AAA–D rating system based on the services offered, adherence to Reg ATS-N disclosures, spreads, public price quotes, order size, order type, and other dark orders, with AAA being “Excellent” quality trade facilitation, BBB being “Market”, and D being “Poor” facilitation relative to other available pools. Using predetermined, uniform SEC standards to identify pools as more or less prone to quality trade facilitation would maintain anonymity, promote predictability, and limit fragmentation. Such a system would also reduce the research costs incurred in compiling and comparing each pool’s opaque trade history.

Further, this quality trade facilitation report would obviate the need to engage in the previously proposed solutions to dark liquidity or added regulation. As participants could properly identify and evaluate which services and restrictions correlate with higher quality execution probabilities, larger orders could be placed with a smaller number of trade venues. Thus, the five percent threshold would actually serve to limit missed liquidity and retard fragmentation. While Reg ATS-N would require pools to publicly disclose services such as the use and forms of IOIs, meaningful comparison criteria would allow the market to govern which services achieve best execution and provide superior investor protection. Such a report, in conjunction with Reg ATS-N, would also strengthen hosts’ natural incentive to protect against IOI misuse, as heightened disclosure of each pool’s trade policies and services would make it easier for customers to research and identify pools more suited to their particular trade preferences. Finally, this proposal would only serve to supplant heightened back-end disclosure, as back-end trade disclosure does little to address issues relating to missed liquidity and execution quality.

CONCLUSION

In order for the market to effectively govern, market participants need access to the information that allows them to make informed investment decisions. The dark liquidity market is, despite the passing of the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, a highly unregulated market sector. With the passing of Reg NMS, the SEC instituted certain protocols intended to limit the perceived downsides to dark liquidity.²⁰⁹ However, calls for heightened back-end disclosure, a reduced daily trade volume

209. Eng et al., *supra* note 13, at 46.

threshold, and enhanced IOI disclosure left participants without meaningful evaluative tools.²¹⁰

Therefore, the SEC would benefit by implementing an independent, dark market-wide reporting system addressing quality trade facilitation. A system that allows investors to draw meaningful comparisons between pools and their related services would help limit fragmentation, prevent against market manipulation, promote liquidity, foster predictability, reduce transaction costs, cure information asymmetry, and reduce barriers to entry for prospective dark market participants. In sum, this proposal—a more expansive version of Reg ATS-N—would be a proper and effective way to balance the dark with the light.

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210. *Id.*

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