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### Decent Exposure: The SEC's Lack Of Authority And Restraint In **Proposing To Eliminate Flash Trading**

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# Decent Exposure: The SEC's Lack of Authority and Restraint in Proposing To Eliminate Flash Trading

### DAVID D. GRUBERG\*

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#### I. Introduction: The Concern over "Flashing"

On a humid July evening in 2009 at Newark Liberty Airport, Sergey Aleynikov was not greeted by his wife and children, but rather welcomed home by agents of the Federal Bureau of Investigation. Suspected of pilfering 32 megabytes of Goldman Sachs's roughly 1200-megabyte computer software program capable of "ultrafast" computerized securities trading, Aleynikov sat in a Newark jail awaiting a bond hearing on his first night home from his new job at a trading firm in Chicago. Aleynikov, a software developer, left Goldman Sachs after roughly two years as a vice president, accepting a position that paid a tripled salary (approximately \$1.2 million) and a million dollar mansion, and taking with him bits and pieces of Goldman Sachs's code, which he allegedly transferred to a server in Germany.

In the past several years, the computer "geek" has emerged from the shadows of online gaming to the spotlight of Wall Street. Through

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<sup>1.</sup> Alex Barenson, Arrest Over Trading Software Illuminates Wall St. Secret, N.Y. TIMES, Aug. 23, 2009, http://www.nytimes.com/2009/08/24/business/24trading.html?\_r=2&hpw=page wanted=all.

<sup>2.</sup> Id. Such software enables large institutional investors to buy and sell securities within milliseconds. Id.

<sup>3.</sup> Id.

the development of high-frequency algorithmic trading and its use in flash trading, the "geek" has become the mastermind behind billions of dollars in profits for large institutional investors. Until July of 2009, such trading software and code were locked, encrypted, guarded, and kept as Wall Street's technological secret. Only upon the arrest of millionaire "geek" Aleynikov did the average investor become aware of the technological innovation driving the world's largest investors, the world's largest securities market, and consequently, the world's largest economy.

The prosecutor for the criminal case, Assistant United States Attorney Joseph Facciponti, summarized the significance of Aleynikov's actions: "The bank itself stands to lose its entire investment in creating this software to begin with, which is millions upon millions of dollars." It is estimated that high-speed trading, such as flash trading, will provide more than \$8 billion in profits in 2009 for Wall Street investment firms. Given the enormous investment required for the development of the software, codes, and systems capable of trading in milliseconds, in addition to the potential profits resulting from the millisecond trades themselves, the significance of high-speed trading has sparked heated debate over its fairness and legitimacy. Of great concern is the use of flash trading, a form of high-speed trading available only to those investors with the resources needed to develop the software. As a result, on September 18, 2009, the Securities and Exchange Commission proposed to eliminate the use of flash trading from the domestic securities markets.

In its proposal, the SEC focuses on flash trading's effect on fairness, competition, and efficiency within the domestic securities markets. The SEC argues that the flashing of order information could lead to an inherently unfair "two-tiered market in which the public does not have access, through the consolidated quotation data streams, to information about the best available prices" for securities that is available to flash traders through "proprietary data feeds." Furthermore, the SEC argues that flash trading hinders both competition and efficiency by providing a

<sup>4.</sup> Id. ("A geek who writes code—those guys are now the valuable guys.").

<sup>5.</sup> Id.

<sup>6.</sup> *Id*.

<sup>7.</sup> Id.

<sup>8.</sup> See Jenny Anderson, U.S. Proposes Ban on Flash Trading on Wall Street, N.Y. TIMES, Sept. 17, 2009, http://www.nytimes.com/2009/09/18/business/18regulate.html; see also Liz Moyer, Schumer Calls for Crackdown on "Flash" Trading, FORBES, July 24, 2009, http://www.forbes.com/2009/07/24/flash-trading-schumer-business-wall-street-flash.html.

<sup>9.</sup> Anderson, supra note 8.

<sup>10.</sup> See SEC Proposed Rule: Elimination of Flash Order Exception from Rule 602 of Regulation NMS, Release No. 34–60684 (Sept. 18, 2009).

<sup>11.</sup> Id. at 5, 28.

"last-mover advantage" to those using the flash trading system. <sup>12</sup> In other words, flash traders can withhold displaying liquidity until after their computer systems read the flash orders and can subsequently execute at such a rapid rate that "slower" traders' orders are moved aside and left unexecuted. <sup>13</sup> Lastly, the SEC claims that flash trading is "no longer necessary or appropriate" because, "in today's highly automated trading environment," flash trading does not provide the added efficiency that it once did when computerized trading was less prevalent. <sup>14</sup>

However, the SEC's proposal to eliminate the use of flash trading is unwarranted and an overreaction to the recent economic crisis. In fact, the SEC lacks the statutory authority to eliminate the use of flash trading. But, even if the SEC had the authority, it should refrain from exercising it given the importance of the national securities markets in rebuilding investor confidence and restoring the economy, and considering the significant role that flash trading plays in those markets. To assist in the understanding of the trading practice at issue, Section II of this article outlines the basic mechanics of the flash trading process. Section III proceeds by exposing the SEC's lack of statutory authority under the Securities Exchange Act of 1934, and its subsequent amendments, to impose a ban on flash trading. Section IV argues that even if the SEC were to have such authority, the SEC should refrain from such action for three reasons. First, flash trading enables broker-dealers to meet their best execution obligation, and failure to use flash trading, if practicable and feasible, could constitute a deceptive practice. Second, flash trading promotes competition between markets, between individual orders, and outside of the markets as the result of, and product of, technological innovation. Third, flash trading creates a two-tiered market and further fragments the markets in a manner that maintains fairness and is beneficial to investors as well as the national securities markets. Finally, Section V summarizes the arguments propounded in Sections III and IV and concludes with a brief proposal of how the SEC could regulate flash trading under its current authority and in a way that gives deference to the numerous benefits of flash trading.

## II. "Flashing" on Wall Street: The Mechanics of Flash Trading

Since the 1980s, computerized trading of securities has become a significant part of Wall Street. In fact, such trading has increased the trading volume on the New York Stock Exchange by 164% since

<sup>12.</sup> Id. at 18.

<sup>13.</sup> Id.; see also Anderson, supra note 8.

<sup>14.</sup> Proposed Rule, supra note 10, at 18.

2005.<sup>15</sup> As a consequence of the increased volume, computerized trading shot-gunned a race among large institutional investors, particularly investment banks, to invest substantial sums of money and resources in the development of software, codes, and platforms that permit their computerized trading systems to search for additional liquidity for large orders and to execute trades in milliseconds.<sup>16</sup> Due to the tremendous speed at which such software can read orders and execute trades—typically thirty milliseconds to read an order and five to ten milliseconds to execute a trade—several exchanges provide the option of using flash trading.<sup>17</sup>

Flash trading occurs in three steps.<sup>18</sup> First, on arrival in the open market at an exchange offering flash trading (but prior to being "flashed"), an order to buy or sell will interact immediately with any available contra-side trading interest at the exchange.<sup>19</sup> For example, a marketable flash order to buy can execute immediately against a displayed order to sell at the receiving exchange that is priced at the national best bid and offer price.<sup>20</sup> As a result, the public can still interact with such orders at that exchange prior to the "flashing" of that order. Second, if no such order exists in the open market at that exchange, the order is then "flashed" on an electronic board, typically for a duration of 30 to 500 milliseconds, depending on the particular exchange.<sup>21</sup> Although the "flashed" order on the electronic board is

<sup>15.</sup> NYTimes.com, High-Frequency Algorithmic Trading, http://topics.nytimes.com/topics/reference/timestopics/subjects/h/high\_frequency\_algorithmic\_trading/index.html (last visited Jan. 15, 2010).

<sup>16.</sup> Id.

<sup>17.</sup> Id.; see also Anderson, supra note 8. The exchanges that offer, or offered, flash trading include the CBOE, CBSX, Nasdaq, BATS, the BOX of the BSE, and Direct Edge, a fully electronic exchange. See Proposed Rule, supra note 10. Not all exchanges that provide flash trading charge a fee. For example, Direct Edge offers a pre-routing display product to its participants—the Enhanced Liquidity Provider program—pursuant to which marketable orders are displayed to any of its participants who wish to receive the information in a data feed for which there is no charge. See Letter from William O'Brien, Chief Executive Officer, Direct Edge ECN LLC to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, at 4 (June 3, 2009) (on file with author). Nevertheless, whether or not a fee is charged is of no consequence to the analysis of flash trading.

<sup>18.</sup> For the purposes of this article, the explanation of the flash trading process has been simplified to assist in the understanding of the issue addressed. However, such simplification does not omit information of consequence to the analysis.

<sup>19.</sup> See, e.g., CBSX R. 52.6(a) (2009) (under CBSX flash order rule, the CBSX system will automatically attempt to match market orders against orders at the best price in the CBSX book unless filling the order would result in an execution of a trade-through of another exchange's protected quotation); BOE R. ch. 5, § 16(b)(iii)(2) (2009) (under BOX flash order rule, if there is a quote on BOX that is equal to the NBBO, then the order will be executed against the relevant quote).

<sup>20.</sup> Proposed Rule, supra note 10, at 5-9, 20-21.

<sup>21.</sup> Id.

viewable by all those at the exchange, it is not factored into the national consolidated quotation stream.<sup>22</sup> Moreover, only those who have paid the flash trading fee—provided the particular exchange charged a fee—and who possess the requisite high-speed software and computer systems, have the ability to execute against such orders.<sup>23</sup> Third, if these computer systems fail to execute a trade within milliseconds, usually a result of order quantity discrepancies, the order is routed back to the open market in the original exchange and becomes available to the public and even executable against the best-priced quotations on other markets.<sup>24</sup>

In sum, flash trading provides potentially three opportunities to execute any particular trade that is entered into the flash trading system. Two such opportunities to execute are available to all investors in the open market, while one of the opportunities to execute is available only to flash traders participating in the transaction. Traders without flash trading ability will compete to execute an order before it is flashed and even have an opportunity to compete after the order is flashed (provided the order is not executed within the flash system). On the other hand, traders with flash trading ability will have the opportunity to compete against other flash traders within the flash trading system and additionally in the open market (provided the order is not executed in the flash system). It merits noting that entering a trade into the flash system does not guarantee the execution of that trade and a flash trader may in reality have a better chance of executing a trade in the open market.

### III. THE SEC'S LACK OF AUTHORITY TO BAN "FLASHING"

With the recent concern over fair investment trading practices that was sparked by the downturn of the stock market and global economy, the bank bailouts, and the "overlooked" Madoff Ponzi scheme, the SEC initiated a regulatory overhaul of the securities markets. Despite its commendable intentions, the SEC's action in proposing to ban the use of flash trading is not only unnecessary, but unlawful. In fact, the SEC lacks the statutory authority to eliminate flash trading, and if the SEC were to proceed with such action it would exceed its statutory mandate.

Congress created the SEC for the protection of investors and the public and for the promotion of fairness, competition, efficiency, liquidity, and transparency within the nation's markets.<sup>25</sup> Currently, the SEC possesses rulemaking authority to promote fairness, competition, and

<sup>22.</sup> Id. at 17.

<sup>23.</sup> Id. at 5-9, 20-21.

<sup>24.</sup> Ia

<sup>25.</sup> See generally Paul G. Mahoney, The Exchange as Regulator, 83 VA. L. REV. 1453 (1997)

efficiency; rulemaking authority to eliminate manipulative and deceptive practices; and rulemaking authority to promote liquidity and transparency through a national market system.<sup>26</sup> This is neither an exhaustive list of SEC rulemaking authority nor a static list. Yet, these three mandates, appearing in the Securities Exchange Act of 1934 and its respective amendments<sup>27</sup> are of primary concern in analyzing the proposal to ban flash trading. Because the SEC cannot meet the requirements propounded by the provisions, the federal courts, and the United States Supreme Court, the SEC would exceed its statutory mandate if it finalized its proposal.

### A. Rulemaking Authority To Promote Fairness, Competition, and Efficiency

Under its rulemaking authority to promote fairness, competition, and efficiency, the SEC lacks statutory authority to enact a ban on flash trading. The sections of the Securities and Exchange Act of 1934 providing the rulemaking authority relevant to an analysis of the elimination of flash trading are section 3(f) and section 23(a)(2). The SEC cannot provide sufficient evidence that banning flash trading will promote competition or that permitting flash trading will prevent competition as required by section 3(f). Rather, a ban on flash trading will burden competition and efficiency, requiring the SEC to refrain from taking action under section 23(a)(2). As such, the SEC lacks authority under section 3(f) and section 23(a)(2) and would exceed its statutory mandate if it proceeds to eliminate the use of flash trading.

Section 3(f) of the Securities Exchange Act of 1934 provides that "[w]henever pursuant to [the Exchange Act] the Commission is engaged in rulemaking . . . the Commission shall also consider in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation."<sup>28</sup> In other words, section 3(f) requires an analysis of whether the particular rule or action proposed will promote efficiency and competition. This analysis requires more than just a conclusion that SEC action could promote competition—or even that the existing practice could prevent competition.<sup>29</sup> Rather, the SEC must

<sup>(</sup>describing the various sources of SEC rulemaking authority pursuant to both the Securities Act of 1933 and the Securities Exchange Act of 1934).

<sup>26.</sup> Id.; see also 15 U.S.C. §§ 78b, 78c(f), 78i, 78j, 78k-1 (2006).

<sup>27.</sup> See generally 15 U.S.C. §§ 78a-78mm (Securities Exchange Act of 1934 and related amendments).

<sup>28.</sup> Id. § 78c(f) (emphasis added).

<sup>29.</sup> Am. Equity Inv. Life Ins. Co. v. SEC, 572 F.3d 923, 935 (D.C. Cir. 2009) (finding that the SEC's consideration of the effect of a proposed rule regulating fixed indexed annuities on efficiency, competition, and capital formation was arbitrary and capricious because the SEC did not disclose a reasoned basis for concluding that the proposed rule would increase competition

consider the *extent* of the existing level of competition in the marketplace under the current trading practice and assess any potential increase or decrease in competition.<sup>30</sup> The SEC must also consider whether there exist sufficient protections to enable informed investment decisions based on suitable recommendations in order to determine whether the action would increase efficiency.<sup>31</sup> Furthermore, section 23(a)(2) provides as follows:

The Commission . . . in making rules and regulations . . . shall consider among other matters the impact any such rule or regulation would have on competition. The Commission . . . shall not adopt any such rule or regulation which would impose a burden on competition not necessary or appropriate in furtherance of the purposes of [the Securities Exchange Act of 1934].<sup>32</sup>

Lastly, in interpreting section 23(a)(2), the Supreme Court in *Credit Suisse Securities L.L.C. v. Billing* stated that the SEC is required to take account of competitive considerations when it creates securities-related policy and embodies it in rules and regulations.<sup>33</sup>

In sum, under this rulemaking authority and prior to initiating any rule or regulation, the SEC must conduct its own analysis regarding the *extent* of current market competition and the effect on that competition as a result of enacting the rule or regulation—mere conclusory statements of potential effects will not suffice.<sup>34</sup> The results of this analysis must be specifically stated and if the results reveal that SEC action would unnecessarily and inappropriately burden the current level of competition in the market, the SEC must reject such action and proceed no further.<sup>35</sup>

In its proposed rule for the elimination of flash trading, the SEC states that flash trading *could* destroy fair competition and efficiency if flash trading *were* to expand to greater trading volume.<sup>36</sup> Additionally, the SEC states that banning flash orders *could* lead market participants to display more of their trading interest, thus providing additional price

and it did not make any finding as to the existing level of competition in the market or efficiency of existing state law).

<sup>30.</sup> Id.

<sup>31.</sup> Id. at 936.

<sup>32. 15</sup> U.S.C. § 78w(a)(2) (emphasis added).

<sup>33. 551</sup> U.S. 264 (2007) (stating that the SEC need not rely upon antitrust actions to address anticompetitive behavior where the Exchange Act instructs the SEC to do so on its own and to reject any rule that burdens competition).

<sup>34.</sup> See 15 U.S.C. § 78c(f); Am. Equity, 572 F.3d at 935.

<sup>35.</sup> See 15 U.S.C. § 78w(a)(2); see also Credit Suisse Sec. L.L.C., 551 U.S. at 264.

<sup>36.</sup> Proposed Rule, *supra* note 10, at 15–16 ("The [SEC] is concerned that the use of flash orders by exchanges and other markets, particularly if it *were* to expand in trading volume, *could* detract from the fairness and efficiency of the national market system.") (emphasis added).

transparency.<sup>37</sup> Such conclusory statements of the possible effects that the elimination of flash trading *could* have on efficiency, competition, and price transparency are insufficient to satisfy the requirements of section 3(f) and section 23(a)(2). The SEC does not provide an analysis of the *extent* of current competition and efficiency and the effect of an elimination of flash trading on either competition or efficiency. Such an analysis would reveal that flash trading promotes competition both inside and outside the markets by adding volume and reducing transaction costs.<sup>38</sup> Flash trading also adds efficiency through millisecond executions and millisecond re-routing of orders back to the open market if unexecuted within the flash system.<sup>39</sup> As a result, an absolute ban on flash trading will ultimately burden the competition that flash trading promotes. Therefore, the SEC lacks the statutory authority to impose a ban on flash trading based on its rulemaking authority to promote fairness, competition, and efficiency.

## B. Rulemaking Authority To Deter and Eliminate Manipulative and Deceptive Practices

The SEC also possesses rulemaking authority to deter and eliminate manipulative and deceptive trading practices. However, such authority does not extend to the elimination of flash trading. Section 10(b) provides the SEC with rulemaking authority with regard to manipulative and deceptive trading practices. Section 10(b) states that it is

unlawful for any person . . . [t]o use or employ, in connection with the purchase or sale of any security . . . any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the [SEC] may prescribe as necessary or appropriate in the public interest or for the protection of investors. 40

The purpose of this provision is to prevent activities that create artificial market activity and practices designed to manipulate security

<sup>37.</sup> *Id.* at 18 ("Particularly *if* flash orders *were* offered by all major markets for a security and greatly expanded in trading volume, they *could* significantly undermine the incentives to display limit orders and to quote competitively, and thereby detract from the efficiency of the national market system.") (emphasis added).

<sup>38.</sup> Eliminating flash trading will not only increase transaction costs but will impose a financial burden on the markets and organizations that have developed and used the flash trading system. The markets and other self-regulatory organizations providing for flash trading will need to "file proposed rule changes to remove the flash order functionality from their respective rule books for each system." See Proposed Rule, supra note 10, at 44. Moreover, markets that use flash trading as opposed to floor activity will have to switch their systems and trading structures completely. Id. If one only considers the attorney's fees and programming fees required to do this, the large costs on the markets are brought to light. Id.

<sup>39.</sup> See Section IV.B. infra, for a detailed discussion of how flash trading promotes competition both within the markets and outside of the markets in the boarder economy.

<sup>40. 15</sup> U.S.C. § 78j(b).

prices that would ultimately harm both the public interest and investors. Although manipulation can take many forms, it necessarily consists of any intentional interference with supply and demand for a security. The rulemaking authority pursuant to section 10(b) warrants analysis because the SEC propounds that flash traders are given a "last-mover' advantage over displayed orders in other markets" and thus can "wait to receive the flashed order" before "displaying their orders or quotations in advance of incoming marketable order flow to attract an execution. Such a process, the SEC claims, "may reduce [flash traders'] incentives to display their liquidity," ultimately deceiving traders without access to the flash system and potentially manipulating the price of a security. Despite this possible effect from the use of flash trading, section 10(b) does not provide the authority to impose a ban on flash trading.

The Supreme Court recognized the concept of manipulation and deception narrowly in that scienter, or "specific intent," is required to find that an act was manipulative or deceptive.<sup>45</sup> In order to prevail in a suit charging manipulation or deception, it must be proven that the defendant's primary intent in entering the transaction was price manipulation or deception.<sup>46</sup> Moreover, the Supreme Court has stated that "[u]se of the word 'manipulative' . . . when used in connection with the securities markets . . . connotes intentional or willful conduct designed to deceive or defraud investors by controlling or artificially affecting the price of securities."47 Thus, that the conduct in question had the effect of artificially affecting the price of the security does not suffice for a finding of manipulation or deception. In fact, "manipulation," as used in securities regulation, does not extend to many trading practices that have the ultimate effect of manipulating the price of security but are not so specifically intended. However, there are many well-known prohibited manipulative practices that are inherently dissimilar to flash trading.

<sup>41.</sup> See, e.g., SEC v. First Jersey Sec., 101 F.3d 1450, 1466 (2d Cir. 1996).

<sup>42.</sup> See In re Pagel, Inc., 48 S.E.C. 223, 226 (1985), aff d, 803 F.2d 942 (5th Cir. 1986) (stating that manipulation is the "intentional interference with the forces of supply and demand").

<sup>43.</sup> Proposed Rule, supra note 10, at 18.

<sup>44.</sup> Id.

<sup>45.</sup> See, e.g., Schreiber v. Burlington N. Inc., 472 U.S. 1 (1985); Sante Fe Indus. Inc. v. Green, 430 U.S. 462 (1977); Ernst & Ernst v. Hochfelder, 425 U.S. 185 (1976).

<sup>46.</sup> See SEC v. U.S. Envtl., Inc., 155 F.3d 107 (2d Cir. 1998); United States v. Minuse, 142 F.2d 388, 389 (2d Cir. 1944). However, once the manipulative intent is present, conduct that artificially affects the price of the security is deemed manipulative. See, e.g., Markowski v. SEC, 274 F.3d 525 (D.C. Cir. 2001); GFL Advantage Fund, Ltd. v. Colkitt, 272 F.3d 189 (3d Cir. 2001); Nanopierce Tech., Inc. v. Southridge Capital Mgmt. L.L.C., 2002 WL 31819207 (S.D.N.Y. 2002); Internet Law Library v. Southridge Capital Mgmt. L.L.C., 223 F. Supp. 2d 474 (S.D.N.Y. 2002)

<sup>47.</sup> Schreiber, 472 U.S. at 6 (citing Ernst & Ernst, 425 U.S. at 199) (emphasis supplied).

These include, but are not limited to, wash sales, fictitious trades, trading ahead of customers, high pressure sales tactics, deceptive recommendations, generation of excessive commissions, unauthorized trading, improper order executions, and misuse of customer funds or securities.<sup>48</sup>

Because flash trading does not cause artificial pricing and there is no specific intent to artificially affect the price of the security to defraud through the use of flash trading, as required for a finding of manipulation or deception, the SEC cannot regulate flash trading pursuant to section 10(b)—not to mention section 3(f)—of the Securities Exchange Act of 1934. Without a finding of manipulation or deception, eliminating flash trading is neither necessary nor appropriate to promote the public interest and protect investors. Flash traders merely have the ability to display, and potentially execute, their orders after other orders are "flashed" to them in hope of obtaining the greatest rate of execution and best possible price.<sup>49</sup> This is far from manipulation and deception as defined by the Supreme Court. Moreover, it is argued that flash trading creates a two-tiered market where traders with flash trading capability have an unfair advantage over the average investor and consequently the ability to manipulate liquidity and ultimately pricing.<sup>50</sup> However, despite potential abuses and disadvantages resulting from the creation of a twotiered market, flash trading creates such a market with many benefits, including fulfillment of the best-execution obligation, increased competition, lower transaction costs, and increased liquidity.<sup>51</sup> Most importantly, the lack of a specific intent to manipulate or deceive through the creation of artificial prices is absent from the flash trading system, leaving the SEC powerless in regard to regulating and rulemaking.

### C. Rulemaking Authority To Promote Liquidity and Transparency

Enacted in 1975 and further amended and consolidated in 2005, the SEC introduced its plan to promote liquidity and transparency in an effort to facilitate a national market system for the trading of securities through market regulation.<sup>52</sup> Nevertheless, this does not provide the stat-

<sup>48.</sup> See Thomas Lee Hazen, The Law of Securities Regulation, 626–30 (rev. 5th ed. 2006). A wash sale is a fictitious sale where there is no change in beneficial ownership. See Ernst & Ernst, 425 U.S. at 205 n.25; Dietrich v. Bauer, 76 F. Supp. 2d 312, 339 (S.D.N.Y. 1999). Also, related to a fictitious trade is a fictitious order, or "spoof," that is designed to drive the quoted price higher. Spoofing is a practice whereby someone enters an order to drive the price up and then cancels the order before it is executed. See In re Monski, Exchange Act Release No. 7975, 74 SEC Docket 1815 (May 3, 2001).

<sup>49.</sup> See Proposed Rule, supra note 10.

<sup>50.</sup> Id. at 17

<sup>51.</sup> See Section IV, particularly Section IV.C., *infra*, for a detailed discussion of the benefits provided by the two-tiered market that flash trading creates.

<sup>52.</sup> See generally 15 U.S.C. § 78k-1 (2006) (Regulation NMS).

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utory authority required to impose a ban on flash trading, and any reliance on it would be unwarranted.<sup>53</sup> A ban on flash trading would fail to promote Congress's objectives in enacting section 11A of the Securities and Exchange Act of 1934 and hinder the current promotion of those objectives via the use of flash trading and continued technological advancement.

In deciding to enact section 11A, Congress found that "[t]he linking of all markets for qualified securities through communication and data processing facilities will foster efficiency, enhance competition, increase information available to brokers, dealers, and investors, facilitate the offsetting of investors' orders, and contribute to the best execution of such orders." Moreover, Congress found that "new data processing and communications techniques create the opportunity for more efficient and effective market operations" and that

[i]t is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure—
(i) economically efficient execution of securities transactions; (ii) fair competition . . .; (iii) availability . . . of information with respect to quotations . . .; [and] (iv) the practicability of . . . executing . . . orders in the best market.<sup>56</sup>

Thus, through section 11A, Congress indicated that enhancement of competition is only one of the many goals that exchange regulations are required to pursue to facilitate a national market system.<sup>57</sup> Additionally, the legislative history to the 1975 amendments to the Securities Exchange Act of 1934 makes explicit Congress's intent that competitive impact be one factor among many to be considered in making regulatory decisions.<sup>58</sup> From these congressional findings and intentions, Congress granted the SEC rulemaking authority to facilitate a national market system through section 11A of the Securities Exchange Act of 1934.<sup>59</sup> In particular, the rulemaking authority of relevance here is provided for in section 11A(a)(2) and section 11A(c)(1)(B) and (E).<sup>60</sup>

<sup>53.</sup> Some commentators have argued that the SEC exceeded its statutory mandate by enacting Regulation NMS. See Dale A. Oesterle, Regulation NMS: Has the SEC Exceeded its Congressional Mandate to Facilitate a "National Market System" in Securities Trading?, 1 N.Y.U. J. L. & Bus. 613 (2005).

<sup>54. 15</sup> U.S.C. § 78k-1(a)(1)(D).

<sup>55.</sup> Id. § 78k-1(a)(1)(B).

<sup>56.</sup> Id.  $\S$  78k-1(a)(1)(C)(i)-(iv).

<sup>57.</sup> See Gordon v. N.Y. Stock Exch., Inc., 422 U.S. 659, 689 (1975); see also Belenke v. SEC, 606 F.2d 193, 200 (7th Cir. 1979).

<sup>58.</sup> See S. Rep. No. 94-75, 13-14 (1975) (enhancement of competition should not become "paramount to the great purposes of the Exchange Act.").

<sup>59.</sup> See 15 U.S.C. § 78k-1 (2006).

<sup>60.</sup> Id.  $\S$  78k-1(a)(2), (c)(1)(B), (c)(1)(E).

Section 11A(a)(2) directs the SEC to use its authority to "facilitate the establishment of a national market system for securities . . . in accordance with the [congressional] findings and to carry out the objectives set forth [by Congress in section 11A(a)(1)]."<sup>61</sup> Therefore, under section 11A(a)(2) and in accordance with section 11A(a)(1), the SEC may enact a regulation or rule if the proposed regulation either promotes or does not burden the following: efficiency, competition, information transparency, execution success rates, and the best-execution obligation.<sup>62</sup> Only a regulation or rule meeting these requirements would "facilitate" the creation of a national market system and fall within the bounds of the SEC's rulemaking authority. A ban on flash trading would not only fail to meet these objectives but hinder the attempt to meet them through technological innovation.

In fact, flash trading promotes the requirements and objectives of sections 11A(a)(1)-(2) in three ways. First, flash trading promotes efficiency as a result of millisecond trading capabilities and order routing and rerouting. Second, flash trading promotes competition as a result of technological innovation and order routing, as thoroughly discussed in Section IV.B. Lastly, flash trading promotes execution success rates and the best-execution obligation as a result of trading speed and added liquidity, as thoroughly discussed in Section IV.A. infra. Although information transparency as to liquidity for large orders is not necessarily promoted through the use of flash trading,63 flash trading is completely voluntary and available to all investors who choose to invest in the requisite software providing flash trading capability. A decision not to obtain the software is a voluntary decision on the part of the investor, and thus the lack of information transparency that may result from the use of flash trading is not an inherent result of the flash trading system itself but rather the result of vigorous competition. Therefore, because a ban on flash trading would fail to "facilitate" a national market system as required by sections 11A(a)(1) and (2), the SEC lacks authority to impose such a ban.

Moreover, the SEC would exceed its statutory mandate pursuant to sections 11A(c)(1)(B) and (E) if it were to eliminate flash trading. According to those sections, the SEC has authority to enact rules and regulations

necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of [Regulation NMS] to—(B)

<sup>61.</sup> Id. § 78k-1(a)(2).

<sup>62.</sup> See id. §78k-1(a)(1)-(2).

<sup>63.</sup> Information transparency regarding corporate information, i.e., mergers, acquisitions, stock offerings, facility openings and closings, layoffs, etc., remains entirely unaffected by flash trading.

assure the prompt, accurate, reliable, and fair collection, processing, distribution, and publication of information with respect to quotations . . . and transactions . . . ;

... [and] (E) assure that all exchange members, brokers, and dealers transmit and direct orders ... in a manner consistent with the establishment and operation of a national market system.<sup>64</sup>

A ban on flash trading would not promote the objectives of sections 11A(c)(1)(B) and (E), but rather hinder them. Through the flash trading system, orders are routed first through the open market in an attempt to execute against contra-side trading interest, then are routed to the flash system if initially unexecuted, and are finally rerouted back to the open market if unexecuted in the flash system—all within milliseconds.65 Although the SEC does not require any specific timeframe in which orders are to be transmitted and responded to, it does note that "failing to respond within one second after receipt of an order would constitute a material delay," potentially resulting in unreliable or inaccurate information.<sup>66</sup> Thus, the automated directing of orders providing potentially three opportunities for execution within a 30 to 500 millisecond time frame seems sufficiently "prompt, accurate, reliable, and fair" in regard to the distribution of quotation and transaction information. Although some liquidity for large orders may not be displayed as a result of the two-tiered market that flash trading creates, such an effect may be beneficial and thus of no consequence to the present analysis.<sup>67</sup> Lastly, as section 11A(c)(1)(E) essentially mirrors the language and authority granted in sections 11A(a)(1)-(2), the analysis is the same as argued above. Therefore, because of the speed of the flash trading system in searching for and responding to orders to execute against, and because of the identical analysis provided for sections 11A(a)(1)-(2), the SEC also lacks statutory authority to enact an absolute ban on flash trading pursuant to sections 11A(c)(1)(B) and (E).

### IV. THE BENEFITS OF "FLASHING"

Even if statutory authority exists or is later provided by Congress, a ban on flash trading would run contrary to the congressional intent in establishing the SEC. In creating the SEC, Congress intended to establish an agency designed to regulate the domestic securities markets in a fashion that would promote several values. In particular, the SEC is

<sup>64. 15</sup> U.S.C. § 78k-1(c)(1)(B), (E) (emphasis added).

<sup>65.</sup> See Proposed Rule, supra note 10, at 5-9.

<sup>66.</sup> Securities and Exchange Commission, Regulation NMS Final Rule, Release No. 34-51808, File No. S7-10-04 (June 29, 2005).

<sup>67.</sup> See Section IV.C. infra.

required to regulate in a manner that will promote fairness and efficiency, enhance competition, and prevent the creation of two-tiered markets and market fragmentation to the extent that they eliminate fairness and burden efficiency and competition. <sup>68</sup> Moreover, the historic philosophy of the SEC has been one of non-paternalism in which its role focused on regulating the markets, not passing or exercising its own judgment. <sup>69</sup> In proposing a ban on flash trading, the SEC is preventing the natural evolution of the securities markets through technological innovation by passing its own judgment as to the importance and effect of high-frequency algorithmic trading software and flash trading. More importantly however, the SEC has failed to consider the values and objectives that Congress intended for it to promote.

The SEC should refrain from banning flash trading for three reasons. First, flash trading enables broker-dealers to meet their best execution obligation and failure to use flash trading, if practicable and feasible under the circumstances, could constitute a deceptive practice. Second, flash trading promotes competition between markets, between individual orders, and outside the markets as the result of, and product of, technological innovation. Third, flash trading creates a two-tiered market and further fragments the markets in a manner beneficial to all investors as well as the national securities markets.

# A. Promotion of Fairness and Efficiency via the Best-Execution Obligation

Assuring fair execution of customer orders is a concern of the SEC in regulating the operation of the securities markets.<sup>70</sup> As such, broker-dealers have an obligation to ensure that customers receive a fair and prompt execution of both market and limit orders.<sup>71</sup> In an auction market, the price is in theory set by an interaction of the buy and sell orders

<sup>68.</sup> See 15 U.S.C. §§ 78b(b), 78w(a)(2), 78k-1; see also Order Execution Obligations File No. S7-30-95, Sec. Exch. Act. No. 34-36310 (Sept. 29, 1995).

<sup>69.</sup> See MARC I. STEINBERG, SECURITIES REGULATION 1, 15 (1986) ("It should be understood that the securities laws were designed to facilitate informed investment analyses and prudent and discriminating investment decisions by the investing public. It is the investor, not the Commission, who must make the ultimate judgment . . . .").

<sup>70.</sup> See Order Execution Obligations, supra note 68.

<sup>71.</sup> See Order Approving NASD Inc.'s Limit Order Protection on Nasdaq, File No. SR-NASD-94-62, SEC Exch. Act. No. 34-35751 (May 22, 1995). See generally Special Study: Report Concerning Display of Customer Limit Orders, [2000 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 86,306 (May 4, 2000) (providing an overview and discussion of the risks of limit orders, particularly the failure to execute such order due to market prices moving away from the limit price and the risk of priority given to other orders). Generally, an investor wanting to trade a security has two basic choices: either submit a market order or a limit order. A market order simply seeks the best currently available execution whereas a limit order specifies the price at which the investor would be willing to trade. For a limit order, once there are buyers and sellers

contemporaneously placed, provided there will be a perfect match of supply and demand. However, depending on the volume of trading, the time it takes to execute an order may vary, thus destroying some liquidity for investors. To solve this, specialists in an auction market such as the New York Stock Exchange, and dealers in a non-auction market such as the Nasdag, act as both buyer and seller by quoting the "bidasked" prices at which they will both buy and sell—quotes that continuously fluctuate.<sup>72</sup> An attempt is then made to determine the best available quotes, also known as the "national best bid and offer price."<sup>73</sup> Historically, this price was the best price possible. However, the rapid development of computerized trading systems, such as flash trading, reflects competitive innovation designed to facilitate the discovery of better prices than posted quotes in the dominant markets. As a result, the dominant markets have evolved into a somewhat hybrid model, incorporating these high-speed computer systems to seek the best possible price, thus nearly eliminating the traditional floor-trading model.<sup>74</sup> Furthermore, high-speed computer trading software sparked the creation of other solely computerized markets where the same securities that were once traded only in the dominant markets are now traded. Consequently, broker-dealers are left with deciding "when" and "where" to execute their customers' trades without violating their best-execution obligation.

Determining the "when" and "where" is rarely easy, and the line between best execution and a violation of such is far from definite:

Unlike pornography, which while difficult to define is known when it is seen, best execution is easily defined but is often unrecognizable. This reflects the difficulty that the term "best execution" does not connote a single execution attribute, such as a price, but rather attaches to a vector of execution components. These certainly include the trade price, but they also involve the timing of trades, the trading mechanism used, the commission charged, and even the trading strategy employed . . . . . <sup>75</sup>

However, the Third Circuit's en banc decision in *Newton v. Merrill*, *Lynch*, *Pierce*, *Fenner & Smith* provides a guideline as to what may be considered the "best" execution in light of rapidly developing technol-

willing to trade at that price, an effort is made by the broker to complete the transaction. HAZEN, *supra* note 48, at 658-59.

<sup>72.</sup> HAZEN, supra note 48, at 654-56.

<sup>73.</sup> James D. Cox, Robert W. Hillman & Donald C. Langevoort, Securities Regulation: Cases and Materials 1010 (6th ed., Aspen Publishers 2009).

<sup>74.</sup> See Jerry W. Markham & Daniel J. Harty, For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECN's, 33 J. Corp. L. 865 (2008).

<sup>75.</sup> Jonathan R. Macey & Maureen O'Hara, The Law and Economics of Best Execution, 6 J. Fin. Intermediation 188 (1997).

ogy and the creation of multiple markets.<sup>76</sup> The Third Circuit considered whether the defendant broker-dealers defrauded their customers when they executed their orders at the readily available national best bid and offer price rather than engaging in additional efforts, such as using the Instinet system, to find a better price.<sup>77</sup> The court held that in light of new technological developments, "the broker-dealer, absent instruction to the contrary, is expected to use reasonable efforts to maximize the economic benefit to the client in the transaction."<sup>78</sup> In other words, a failure to seek out the "best reasonably available price" through alternative electronic trading systems could be considered a deceptive practice if the use of such systems was viable under the particular facts.

Given the "best reasonably available price" standard from *Newton* and various relevant considerations, i.e., price, fees, trading strategy, and mechanism used, a ban on flash trading would in effect prevent broker-dealers currently using flash trading from fulfilling their best-execution obligation. Through flash trading, orders are "flashed" for less than 500 milliseconds, typically 30 milliseconds—but can be executed in as little as 10 milliseconds and occasionally as fast as 5 milliseconds—before being rerouted back to the open market and available to the public to execute against best-priced quotations on other markets.<sup>79</sup> As such, execution within the flash trading system will most likely be the "best reasonably available price" in that the broker-dealer would have used reasonable efforts to seek out a superior price—be it the national best bid and offer price or something more favorable—for his customers through the use of the fastest available technology.

In addition to receiving the "best reasonably available price" via execution through the flash trading system, the economic benefit to the customer would also be maximized through the decreased transaction costs associated with flash trading. For example, flash orders may be executed for lower fees than those charged by other markets for accessing displayed quotations—causing professional short-term traders with large trading volume to shoulder most of the burden. 80 By eliminating

<sup>76. 135</sup> F.3d 267 (3d Cir. 1998) (en banc).

<sup>77.</sup> Id. Instinct is a high-speed computerized alternative trading system that facilitates trading outside of the stock exchanges.

<sup>78.</sup> *Id.* at 270. *Newton* also noted certain factors relevant to best execution—order size, trading characteristics of the security, speed of execution, clearing costs, and the cost and difficulty of executing an order in a particular market. *Id.* at 270 n.2 (citing Payment for Order Flow, Exch. Act Rel. No. 33026 (Oct. 6, 1993); 58 FR 52934, 52937-38 (Oct. 13, 1993) (Proposed Rules)).

<sup>79.</sup> Proposed Rule, supra note 10, at 5-9; see also Anderson, supra note 8.

<sup>80.</sup> Proposed Rule, *supra* note 10, at 41. On average, the total cost from increased fees for all flash order users on a yearly basis in listed equities would be roughly \$24,837,120 (8.8 billion shares of total volume x 0.8% of total volume attributable to flash volume x \$0.0014 estimated per

flash trading, the SEC would prevent broker-dealers that currently have access to flash trading from seeking the best and most prompt execution for their customers and subsequently subject them to increased transaction costs. Such regulation runs contrary to the promotion of fairness and efficiency via the best and prompt execution obligation.

Newton also provides for a case-by-case determination regarding the viability and practicability of requiring the use of new technological developments. This means that a broker-dealer without the resources to obtain access to flash trading would not be penalized for failing to execute a customer's order at a price that could only be obtained through the use of the flash trading system. Consequently, it is irrelevant that the high-frequency algorithmic trading systems required to access flash trading are unaffordable for many investors that lack the resources of the large institutional investors that currently employ flash trading. Nevertheless, it must be noted that given Newton, it is possible that a failure to use flash trading, if the use of flash trading is viable and practicable in the particular situation, could constitute a deceptive practice on the part of the broker-dealer and possibly result in either private or public suit, or both. Each of the superior of the part of the broker-dealer and possibly result in either private or public suit, or both.

### B. Promotion of Competition and Technological Innovation

Flash trading not only promotes competition but also evidences the technological innovation resulting from such competition. By granting regulatory power to the SEC, Congress intended that the promotion of competition would be a—although not *the*—major facet of the SEC's existence.<sup>83</sup> Moreover, Congress intended for the SEC to "take advan-

share increase in access fee x 252 trading days). *Id.* at 42. In addition, the total cost from increased fees for all flash order users on a yearly basis in listed options would be roughly \$13,309,429 (13,898,735 total options contracts x 1.9% of total contracts attributable to flash volume x \$0.20 estimated per contract increase in access fee x 252 trading days). *Id.* at 42–43. This is a total of approximately \$38,146,549 in increased access fees.

<sup>81.</sup> See Newton, 135 F.3d at 270-71.

<sup>82.</sup> See, e.g., 17 C.F.R. § 240.10b-5 (2010) (prohibiting fraudulent or deceitful practices); 15 U.S.C. § 78u (2006) (granting the SEC broad enforcement powers to sue in federal court to enjoin violations of its rules and seek other equitable remedies); see also Superintendent of Ins. of N.Y. v. Bankers Life & Cas. Co., 404 U.S. 6 (1971) (confirming existence of an implied private 10b-5 action).

<sup>83.</sup> See 15 U.S.C. § 78b(b) (providing that when the SEC is engaged in rulemaking, it must consider "whether the action will promote efficiency, competition, and capital formation.") (emphasis added); id. § 78w(a)(2) (providing that the SEC "shall not adopt any such rule or regulation which would impose a burden on competition not necessary or appropriate in furtherance of [the Exchange Act].") (emphasis added); id. § 78k-1(a)(1)(C)(ii) ("The Congress finds that—It is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure—fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets.") (emphasis added).

tage of opportunities created by new data processing and communications technologies to preserve and strengthen the securities markets."84 Professor Klock also notes that:

[t]echnology related to the speed of communications, order processing, clearing, record keeping, and the like is clearly evolving and so goes the evolution of financial markets, including the rules under which they operate. In other words, the rules themselves are endogenous—or an outcome—to the process, not merely an input to it. Competition is the tool of evolution which ensures adaptation and cost minimization to survive.<sup>85</sup>

Given the importance of competition, the SEC's primary concern is facilitating two distinct forms of competition that contribute to efficient markets: competition among individual markets and competition among individual orders. Ref Vigorous competition among markets lends to innovative and efficient trading systems, whereas competition among orders promotes transparency and efficient pricing of securities. These two forms of competition bear an inverse relationship to one another. An increase in competition among markets detracts from competition among orders, and vice versa, leaving the SEC to strike a balance to assure investors that they are "participants in a system which maximizes the opportunities for the most willing seller to meet the most willing buyer." A ban on flash trading would disrupt this balance, remove the

Id

88. H.R. REP. No. 94-123, at 50 (1975); see also Lawrence Harris, Consolidation, Fragmentation, Segmentation, and Regulation, in Global Equity Markets: Technological Competitive and Regulatory Challenges, 269-70 (Robert A. Schwarz ed., 1995) (stating that "policies that would maximize the benefits from one type of competition can decrease the benefits obtained from the other type of competition. For example, if all trades in a given security were consolidated by regulation into the same market, it would be easy to find the best price for the security, but it would be difficult or impossible for innovative trading systems to develop and be adopted. Public policies therefore may need to balance the benefits obtained from these two types of competitions.").

<sup>84.</sup> Regulation NMS: Exch. Act Rel. No. 51808 (June 9, 2005).

<sup>85.</sup> Mark Klock, The SEC'S New Regulation ATS: Placing the Myth of Market Fragmentation Ahead of Economic Theory and Evidence, 51 Fla. L. Rev. 753, 786 (1999).

<sup>86.</sup> Regulation NMS, supra note 84.

<sup>87.</sup> Id. Domestically, competition exists both among a variety of different types of markets and among orders within these markets. These are:

<sup>(1)</sup> traditional exchanges with active trading floors, which even now are evolving to expand the range of choices that they offer investors for both automated and manual trading; (2) purely electronic markets, which offer both standard limit orders and conditional orders that are designed to facilitate complex trading strategies; (3) market-making securities dealers, which offer both automated execution of smaller orders and the commitment of capital to facilitate the execution of larger, institutional orders; (4) regional exchanges, many of which have adopted automated systems for executing smaller orders; and (5) automated matching systems that permit investors, particularly large institutions, to seek counter-parties to their trades anonymously and with minimal price impact.

incentives for technological innovation, and negligibly affect competition among individual orders outside of the flash trading system.

The development of flash trading evidences years of vigorous competition among markets and provides a market for additional competition. Such competition led to technological innovation, which in turn created the electronic-communications networks and alternative-trading systems that have begun to dominate securities trading and permitted the expansion of the investor-trader demographic.89 Flash trading creates a separate market where large institutional investors, with the financial resources to obtain the requisite software, can match buy and sell orders within milliseconds. This separate market structure provides additional opportunities to execute trades because if orders that originate in the open market are not executed, they are "flashed" in the flash system and ultimately rerouted back to the open market if the flash computer systems fail to execute the trade within the millisecond time frame. 90 As a result, flash trading does not hinder competition among orders but rather promotes competition by allowing up to three opportunities to execute any given order. Traders without flash trading ability will compete to execute an order before it is flashed and even have an opportunity to compete after the order is flashed (provided the order is not executed within the flash system). On the other hand, traders with flash trading ability will have the opportunity to compete against other flash traders within the flash trading system and additionally in the open market (provided the order is not executed in the flash system).

Furthermore, "flash orders can be viewed as a market's competitive strategy to maximize trading volume and revenues that would be eliminated by adoption of the [ban on flash trading]." Of the 8.8 billion shares constituting the daily volume in domestically listed securities, approximately 1% to 2.8% of such volume is attributable to flash trad-

<sup>89.</sup> For example, algorithmic trading has become widely used by pension funds, mutual funds, and other investor-driven institutional traders to divide large trades into several smaller trades in order to manage market impact and risk. See Moving Markets Shifts in Trading Patterns Are Making Technology Ever More Important, The Economist, Feb. 4, 2006, at 32, available at 2006 WLNR 1938733. In 1950, only 7.2% of total U.S. equity was held by U.S. institutions, whereas in 2008, 57.4% of total U.S. equity was held by U.S. institutions, which rely on high-speed computer-based trading systems to execute their trades. See Board of Governors of the Federal Reserve System, Flow of Funds Accounts of the United States, Corporate Equities, Table L. 213 (2008), reprinted in Cox, Hillman & Langevoort, supra note 73, at 101. Moreover, computer-based trading systems have not only provided for the "average" trader to execute his own trades through online services, but a continuously increasing number of households rely upon institutional intermediaries, with the technological capability, to invest in mutual funds and the like for their respective retirement accounts.

<sup>90.</sup> Proposed Rule, supra note 10, at 5-9.

<sup>91.</sup> Id. at 46.

ing. 92 Moreover, the SEC estimated that the total volume of flash orders that executed within the flash system as of July 2009 was approximately 3.1% of total trading volume for listed equities and 1.9% of total trading volume for listed options.<sup>93</sup> This additional volume is further evidence of competition among markets and the importance of continued innovation. On October 22, 2009, representatives of Goldman Sachs released a "Market Structure Overview" outlining the current state of the equity markets with a focus on flash trading and other high-frequency trading models.94 In this outline, Goldman Sachs reveals that the "market is healthy" with "no dominance by any one player." In particular, "brokers compete for customer order flow through innovative tools and aggressive pricing" while the "exchanges compete for order flow by reducing execution fees."96 As a result, Goldman Sachs notes, "fierce competition has fostered innovation . . . ultimately resulting in more powerful data, decision tools, and lower costs for the end customer."97 Elimination of flash trading would serve to burden competition among large institutional investors currently accessing flash trading, remove the significant volume attributable to flash trading, and effectively eliminate the incentives of technological innovation. In turn, a lack of incentives will discourage (1) larger investors developing even faster systems to continuously maximize profits, promote competition, and lower the costs of technology and (2) smaller investors from continuously increasing resources through vigorous competition to maximize profits and make such systems affordable to them as well.

Lastly, the elimination of flash trading is likely to have a broader impact on both institutional investors employing such technology and the national economy. First, large institutional investors initiated multimillion dollar flash trading research and development projects for the

<sup>92.</sup> Id. at 42; see also Anderson, supra note 8.

<sup>93.</sup> Proposed Rule, *supra* note 10, at 15 n.41 ("The [SEC's] estimate of flash order trading volume in July 2009 reflects discussions with the markets that offered flash orders during that time—CBSX, Direct Edge, BATS, Nasdaq, and Nasdaq OMX BX for equity trading, and BOX, CBOE, and ISE for options trading. These volume estimates reflect executions by market participants in response to flashed order information.").

<sup>94.</sup> GOLDMAN SACHS, "MARKET STRUCTURE OVERVIEW," COMMENT TO PROPOSED RULE: ELIMINATION OF FLASH ORDER EXCEPTION FROM RULE 602 OF REGULATION NMS (Oct. 22, 2009), available at http://www.sec.gov/comments/s7-21-09/s72109-53.pdf (In September 2009, counsel to Commissioner Aguilar met with representatives from Goldman Sachs to discuss issues involving high frequency trading and flash trading. The representatives provided the "Market Structure Overview" to the SEC as a comment to the proposed rule for the elimination of flash trading.).

<sup>95.</sup> Id. at 6.

<sup>96.</sup> Id.

<sup>97.</sup> Id.

use of flash trading on equity and options exchanges.<sup>98</sup> If flash trading is eliminated, these institutions will not only have to pass up larger gains at lower transaction costs for their customers, but will also have to write off their investment in flash trading technology as a loss.<sup>99</sup> The large institutional investors will no longer expend the substantial resources to develop new technology in a drive to compete for the higher profits.

Second, the technology sector at large is likely to feel the impact of an elimination of flash trading. At a current market capitalization of approximately \$9553 billion, 100 the technology sector benefits from increased competition among institutional investors striving to develop the most efficient trading software feasible. If these institutions are no longer permitted to compete in the flash trading arena, they lose an incentive to continuously invest in and develop new high-frequency algorithmic trading technology. Without such continued development driven by competition and incentives, the technology sector will begin to contract. Given the size and growth rate of the sector, a contraction will ultimately negatively impact the broader national economy.

### C. Creation of a Beneficial Two-Tiered Market and Market Fragment

Concerns that flash trading will create a two-tiered market and further fragment the equity and options markets in a manner that will negatively impact them are significantly misplaced. The creation of a two-tiered market and market fragmentation should be minimized and constantly observed for the purposes of imposing further regulations to ensure transparency, efficiency, and fair competition. Flash trading gives investors with flash trading capabilities an advantage over investors lacking such capabilities—that is, flash trading creates a two-tiered market—and flash trading creates a separate market in which orders can be executed—that is, flash trading further fragments the securities markets. Despite this, however, flash trading ultimately fails to raise the concerns that the SEC focuses on but rather creates a two-tiered market and further fragments the markets in a manner that maintains fairness and is beneficial to the markets and investors alike. <sup>101</sup>

<sup>98.</sup> Because of the potential for greater liquidity and larger profits, hedge funds and investment banks offer million-dollar salaries to their software engineers. See Barenson, supra note 1. For example, the Citadel Investment Group, a \$12 billion hedge fund, had paid tens of millions to two of its programmers and has spent millions more developing and protecting the software. Id.

<sup>99.</sup> The Tabb Group, a financial markets research firm, estimates that high-frequency algorithmic trading programs will make \$8 billion this year for Wall Street firms. *Id*.

<sup>100.</sup> Technology Sector Table, Yahoo! Finance, Jan. 13, 2010, http://biz.yahoo.com/p/8ttmd.html.

<sup>101.</sup> See generally 15 U.S.C. § 78k-1 (2006) (Regulation NMS).

By providing an unfair advantage to particular groups of investors—as a result of greater resources, access to technology, or otherwise—a two-tiered market is created and typically condemned because of notions of "fairness" among investors. Furthermore, market fragmentation—the creation of several markets trading the same security—is usually considered a negative attribute of technological development. As a result, the SEC has attempted to consolidate the markets to protect investors from these issues. However, similar to numerous other SEC approved trading practices, flash trading provides significant benefits by creating a two-tiered market and further fragmenting the market and does not violate the values the SEC attempts to protect.

First, to understand how two-tiered markets and market fragmentation resulting from technological innovation can positively affect the markets and maintain fairness among investors, one must look past the SEC's unrealistic assumption that drives its rulemaking in this arena. In analyzing the negative consequences of two-tiered markets and market fragmentation and thereby promoting a consolidated market system, it must be assumed—as the SEC assumes—that all investors and their respective trading issues are identical. <sup>105</sup> This is simply untrue. Not all market participants possess the same objective function: "Markets fragment because traders are not all identical and because the trading problems they face are not all identical. The same fundamental asset may simultaneously trade in different market structures because different structures better serve the needs of some traders than others." <sup>106</sup>

<sup>102.</sup> Id. § 78k-1(a)(1)(C)(ii) ("[I]t is in the public interest and appropriate for the protection of investors . . . to assure—fair competition . . . .") (emphasis added).

<sup>103.</sup> Id. § 78k-1(a)(1)(D) ("The linking of all markets for qualified securities through communication and data processing facilities will foster efficiency, enhance competition, increase the information available to brokers, dealers, and investors, facilitate the offsetting of investors' orders, and contribute to best execution of such orders.") (emphasis added); see also Kathleen Hagerty & Robert L. McDonald, Brokerage, Market Fragmentation, and Securities Market Regulation, in The Industrial Organization and Regulation of the Securities Industry, 35 (Andrew W. Lo ed., 1996).

<sup>104.</sup> See 15 U.S.C. §78k-1.

<sup>105.</sup> See Harris, supra note 88, at 269–72 ("Consolidation can be best understood by momentarily adopting a simple but highly unrealistic assumption. Assume that all traders and all trading problems that they face are identical . . . . If this extreme assumption were true, all traders would want to trade in the same market in which all other traders trade.").

<sup>106.</sup> See Macey & O'Hara, supra note 75, at 189. Moreover, "[t]he market in which all participants trade in one place at one price is not necessarily the market preferred by all traders and there is no compelling reason for thinking it best in any sense." Hagerty & MacDonald, supra note 103, at 61. Furthermore, Professor Klock poses a rhetorical question that seems to further show that the SEC's assumption is faulty and that two-tiered markets and market fragmentation are not always the source of harm to investors: "Why should the SEC be concerned that an ATS [such as flash trading] might have provided a price 1/16th better but been unavailable to a customer when the SEC is not concerned that the customer might have lost more than that paying more than the lowest available brokerage fee?" Klock, supra note 85, at 790.

Thus, putting aside the unrealistic assumption and realizing that no single investor or group of investors is identical, the benefits of a two-tiered market and market fragmentation become visible. Flash trading and numerous currently accepted trading practices evidence this.

The first of such practices is "after-hours" trading. The SEC permits "after-hours" trading through the exchanges and various electronic communications networks that have been approved as public-trading markets.<sup>107</sup> The exchange "after-hours" trading has been limited to institutional investors and large block transactions. 108 Currently on the New York Stock Exchange, there are two "after-hours" sessions operated through a screen-based execution system instead of taking place on the floor of the exchange. 109 The screen-based "after-hours" system is open to all investors for forty-five minutes beginning fifteen minutes after the close of trading.<sup>110</sup> However, a second screen-based system is open to large institutional traders dealing in large quantities of stocks and lasts for one hour and fifteen minutes after the close of trading.<sup>111</sup> Professor Hazen states that "[t]he significance of the screen-based system is that it bypasses the specialist system that has been the core of the exchange mechanism for many years."112 Essentially, "after-hours" trading creates a two-tiered market—precisely what the SEC plans to avoid with banning flash trading—that is permitted to operate.

Similar to flash trading, "after-hours" trading provides added liquidity for large orders that may take a relatively long time to execute in the open market as the particular quantities may not be available at the desired price. Moreover, in "after-hours" trading and flash trading alike, large institutional investors with access to such trading can execute their large orders without significantly impacting the price of the stock for the average investor and allowing for such an investor to still obtain the "best available price." As a result, both large institutional investors and smaller investors obtain advantages. This maintains fairness among investors as well as provides a significant benefit to the entire market.

<sup>107.</sup> HAZEN, supra note 48, at 618.

<sup>108.</sup> Id. Similar to the practice of "after-hours" trading is the Commodity Futures Modernization Act of 2000, which formally recognized the over-the-counter commodities markets. See Commodity Futures Modernization Act of 2000, Pub. L. 106-554, 114 Stat. 2763 (Dec. 21, 2000). These markets are virtually unregulated except for antifraud proscriptions and are open only to the largest institutional investors dealing in certain forms of swap trades and other hybrid contracts. HAZEN, supra note 48, at 618. Such appears to create a permissible two-tiered market system.

<sup>109.</sup> HAZEN, supra note 48, at 618.

<sup>110.</sup> Id.

<sup>111.</sup> Id.

<sup>112.</sup> Id.

The SEC also permits a practice known as "payment for order flow." Market makers can enter into arrangements where brokers agree to send all orders to a particular market maker in return for some sort of consideration, usually cash. 113 In other words, payment for order flow occurs when a broker charges another broker a fee for directing orders to him or her.<sup>114</sup> These payments are permissible so long as the payor and payee meet certain disclosure requirements. 115 Alternative trading systems and other investors can voluntarily enter into private agreements in their "own" market, thereby further fragmenting the markets, in anticipation of increased liquidity and likelihood of execution. 116 This is similar to flash trading in that investors voluntarily enter their orders into the flash system in hope of gaining additional liquidity for their orders. 117 Voluntariness is an important consideration in that employing payment for order flow or flash orders does not guarantee execution of any particular order and as such, orders could go unexecuted where they may have had a better chance at execution in the open market. 118 Because such practices are fully voluntary, the investor is well aware that he may be taking a greater risk than if he merely entered his order in the open market. In fact, investors without access to flash trading may be better off than the investor who voluntarily took the chance of entering his order in the flash system. Moreover, by permitting a two-tiered market through flash trading, large institutional investors—who hold approximately 57.4% of U.S. equity<sup>119</sup>—are able to lower their transaction costs and pass the benefits on to their customers in the form of decreased commissions. 120 As a result, competition increases between markets and

<sup>113.</sup> See Robert H. Battalio, Third Market Broker-Dealers: Cost Competitors or Cream Skimmers?, 52 J. Fin. 341, 343 (1997); see also Securities and Exchange Commission website, Payment for Order Flow, http://www.sec.gov/answers/payordf.htm (last visited Dec. 31, 2009).

<sup>114.</sup> HAZEN, supra note 48, at 663.

<sup>115.</sup> See 17 C.F.R. §§ 240.10b-10(a)(2)(i)(c), 240.11A(c)(1)-(3) (2010). For example, rule 10b-10 requires disclosure of payment for order flow in transactions where the broker is acting as the customer's agent, while rule 11Ac1-3 requires that broker-dealers, when opening a new account, make written disclosures of their policies regarding payment for order flow. *Id.* 

<sup>116.</sup> See Klock, supra note 85, at 764 ("If an [alternative trading system] pays brokers for orders which would have otherwise been sent to the floor of the NYSE, the result is clearly more fragmentation of order flow.").

<sup>117.</sup> Proposed Rule, supra note 10, at 37-40.

<sup>118.</sup> Id. at 25.

<sup>119.</sup> Flow of Funds Accounts Table, supra note 89.

<sup>120.</sup> Proposed Rule, *supra* note 10, at 24. This is unlike payment for order flow where the broker keeps the payment, albeit pennies per share, for himself or herself. *See* Payment for Order Flow, *supra* note 113. It should also be noted that even though directing orders pursuant to a payment for order flow can be viewed as contrary to the broker's best execution obligation, the practice is still permitted. *See* NASD Notice 01-22, 2001 WL 278615 (Mar. 16, 2001) ("[B]rokerdealers must not allow an order routing inducement, such as payment for order flow opportunity to trade with that order as principal, to interfere with its duty of best execution.").

fairness is maintained as investors search for the greatest returns in a completely voluntary system.

Another permissible trading practice that creates a two-tiered market and further fragments the markets is the trading of "house stocks." Stocks that are traded solely among the customers of a particular brokerage house are known as "house stocks." When brokerage firms trade "house stocks" among their customers there is no independent market to assess the legitimacy of their market-making activities. Trading in "house stocks" effectively eliminates an outside market, thereby creating a separate market, and takes away competition. Therefore, customers of the brokerage house have an advantage over the rest of the market for the particular "house stocks." This potentially allows for lower transaction costs—most likely through reduced commissions charged to customers. Although trading in "house stocks" virtually eliminates outside market and order competition for such stocks, trading—including *solely* trading—in "house stocks" is neither regulated nor per se illegal. 123

On the other hand, flash trading, through its creation of a two-tiered market and a separate market fragment, promotes competition, <sup>124</sup> and provides for the same benefits as trading in "house stocks," that is, lowered transaction costs. As such, flash trading positively affects the overall market and maintains fairness among investors through lowered transaction costs. Moreover, trading in "house stocks" can lend to market manipulation and various deceptive practices because the broker-dealer acts as the sole active market maker for such stocks. <sup>125</sup> Such market manipulation cannot exist through flash trading, which is controlled by numerous investors who take a chance at execution through a traditional buy-sell transaction within the flash system.

Lastly, a comparison between flash trading and historical floor practices merits brief discussion.

Historically, exchange members located on trading floors have conducted on the spot discussions of price which could not practically be reflected in the published quotation . . . . If it were necessary to make such terms public, it would interfere with, and might make impossible, the effective representation of . . . large orders on a trading floor. Similarly, floor brokers can "request a market" in a security either hypothetically (or conditionally) or with a view to executing a particular order in hand. In either case, the response of the "trading crowd" can be different than the published quotation. It may be impracticable

<sup>121.</sup> See United States v. DiStefano, 129 F. Supp. 2d 342 (S.D.N.Y. 2001).

<sup>122.</sup> HAZEN, supra note 48, at 651.

<sup>123.</sup> See, e.g., SEC v. Graystone Nash, Inc., 53 S.E.C. 2721 (D.N.J. 1993).

<sup>124.</sup> Promotion of competition is thoroughly discussed in Section IV.B. supra.

<sup>125.</sup> See, e.g., SEC v. Hasho, 784 F. Supp. 1059 (S.D.N.Y. 1992).

to require such responses to be published . . . [and] could significantly impair floor brokers' ability to represent large orders effectively. 126

Although such "private auction" environments have been curtailed, 127 they still exist, and the market makers and floor specialists continue to operate as forms of permissible monopolies that greatly benefit institutional investors with large orders. In light of the SEC's attempts to adapt the auctions system applicable to securities exchanges to an entirely electronic environment, as evidenced by the approval of the International Securities Exchange registration as a national securities exchange in 2000, 128 it seems necessary to permit flash trading. Flash trading electronically provides for the "private auction" of large orders that the SEC has considered indispensable despite that the prices flashed—similar to the prices discussed on the floor among floor specialists and market makers in floor trading—are not published in the consolidated quotation data for the public to view. Although flash trading creates a two-tiered market and further fragments the markets, the SEC itself noted the importance and necessity of a two-tiered market and market fragmentation when it involves large institutional orders, as stated above. 129 Without such, large orders would not be represented effectively, and as a result liquidity would diminish and the orders would fail to execute. Given the recent move to establish fully electronic markets, flash trading appears essential to serve the same or a similar function as the "private auctions" of the traders on the floors of the exchanges.

### V. CONCLUSION: "FLASHING" FOR AMERICAN CAPITALISM

With the advent of high-speed computerized trading, the structure, function, and profitability of securities trading has compounded exponentially. However, along with the benefits of technological innovation in the securities markets has come turbulence and consequently, growing concern over increased regulation. In 2009 alone, the SEC proposed new rules for credit-ratings agencies, executive compensation, and flash trading. The recent drastic decline in the national and global securities

<sup>126.</sup> Proposed Rule, supra note 10, at 27.

<sup>127.</sup> See generally 17 C.F.R. § 240.11a-1 (2010) (prohibiting all floor trading by members, unless conducted in accordance with a plan adopted by an exchange and approved by the SEC). For example, a floor trader is prohibited from trading for a customer's account over which the trader exercises discretion. *Id.* 

<sup>128.</sup> See Approval of Application for Exchange Registration International Securities Exchange L.L.C., SEC News Digest 2000-36, 2000 WL 218366 (Feb. 25, 2000).

<sup>129.</sup> Proposed Rule, supra note 10, at 27.

<sup>130.</sup> See generally Securities and Exchange Commission website, Securities and Exchange

markets and economies alerts that some consideration must be given to the various missteps and failures culminating in such decline and that some additional regulation may be warranted. Nevertheless, a ban on the use of flash trading is unnecessary, inappropriate, and merely an overreaching SEC action in the "heat of passion."

If the SEC finalizes its proposal of eliminating the use of flash trading, it will exceed its statutory mandate. Currently, the SEC possesses rulemaking authority to promote fairness, competition, and efficiency; rulemaking authority to eliminate manipulative and deceptive practices; and rulemaking authority to promote liquidity and transparency through a national market system.<sup>131</sup> These grants of authority are provided for through the Securities Exchange Act of 1934 and its respective amendments. However, none of them permit the SEC to impose a ban on the use of flash trading.

The SEC's rulemaking authority to promote fairness, competition, and efficiency does not provide the authority because of the SEC's failure to offer more than mere conclusory statements regarding the probability of the potentially negative effects of flash trading. The SEC fails to provide an analysis of the extent of current competition and efficiency and the effects of flash trading on that competition and efficiency, but rather it inadvertently makes evident the burden on competition that would result from the elimination of flash trading. Further, the SEC lacks the statutory authority under its rulemaking authority to deter and eliminate manipulative and deceptive trading practices because the SEC fails to establish that flash trading is deceptive or manipulative, as defined by the Supreme Court—that is, flash trading is neither specifically intended to nor does it artificially control prices of securities and thereby manipulate the security's price and the market at large. Moreover, flash trading is neither intended nor "designed to deceive or defraud."132

Lastly, the SEC's rulemaking authority to promote liquidity and efficiency through a national market system does not provide sufficient authority to ban flash trading because the use of flash trading promotes the objectives that Congress intended for the SEC to promote through its regulations and rulemaking. First, flash trading promotes efficiency as a result of millisecond trading capabilities and order routing and rerouting. Second, flash trading promotes competition as a result of technological

Commission Proposed Rules 2009, http://www.sec.gov/rules/proposed.shtml (last visited Dec. 31, 2009) (providing access to all SEC proposed and final rules of 2009).

<sup>131.</sup> See 15 U.S.C. §§ 78b, 78c(f), 78i, 78j, 78k-1 (2006).

<sup>132.</sup> Schreiber v. Burlington N. Inc., 472 U.S. 1, 6 (1985) (citing Ernst & Ernst v. Hochfelder, 425 U.S. 185, 199 (1976)).

innovation and order routing. Third, flash trading promotes execution success rates and the best-execution obligation as a result of trading speed and added liquidity. Finally, flash trading promotes "prompt, accurate, reliable, and fair" list dissemination of information and execution pursuant to that information. In sum, flash trading meets and exceeds Congress's objectives in enacting the Securities Exchange Act of 1934 and its respective amendments. If the SEC imposes a ban on flash trading, it will hinder the objectives that it was created to promote.

Even if the SEC possesses the statutory authority to eliminate flash trading, or even if such authority is subsequently provided, the SEC should refrain from eliminating flash trading. The SEC should refrain from eliminating flash trading for the following three reasons. First, flash trading enables brokers-dealers to meet their best execution obligation and failure to use flash trading, if practicable and feasible under the facts, could constitute a deceptive practice subject to liability. Second, flash trading promotes competition between markets, between individual orders, and outside of the markets as the result of, and as the product of, technological innovation. Third, flash trading creates a two-tiered market and further fragments the markets in a manner that maintains fairness and is beneficial to both investors as well as the national securities markets.

If the SEC is to proceed, it is recommended that it consider pursuing two avenues of regulatory action before it decides to impose a ban on flash trading. First, the SEC should impose an "emergency ban" on flash trading among the exchanges and self-regulatory organizations that currently provide for the use of flash trading. Pursuant to the Market Reform Act of 1990, the SEC possesses emergency power to suspend, alter, or impose rules for a maximum of ten business days. 134 During this "emergency ban" the SEC could conduct a thorough analysis of the extent of current market competition and assess the specific impact flash trading has on the markets in an effort to determine whether an absolute ban on flash trading is either necessary or appropriate. After this analysis, the SEC should consider subjecting flash trading to similar disclosure requirements as currently required for payment for order flow. 135 A policy of disclosure would provide for significant regulatory oversight without adversely impacting the tremendous benefits that flash trading provides for the liquidity, efficiency, competition, technological innovation, and profitability of the national securities markets.

<sup>133. 15</sup> U.S.C. § 78k-1(c)(1)(B) (2006).

<sup>134.</sup> Id. § 78l(k)(2) (2006).

<sup>135.</sup> See generally 17 C.F.R. §§ 240.10b–10(a)(2)(i)(c), 240.11A(c)(1)–(3) (2010) (providing for written disclosures to clients if brokers-dealers employ payment for order flow).

Nevertheless, the SEC should reconsider its proposal to eliminate flash trading for the sake of technology, the national securities markets, and the American capitalist economy. Although the current economic downturn and investment-related scandals warrant attention and potential regulatory action, the SEC should exercise a degree of restraint in regard to flash trading. In proposing a ban on flash trading, the SEC is preventing the natural evolution of the securities markets through technological innovation—thereby removing incentives of such innovation—by passing its own judgment as to the importance and effect of flash trading. The SEC has failed to consider the values and objectives that Congress intended for it to promote. Most importantly, however, in addition to considering the state of the economy and Congress's intent, the SEC must always keep in mind that:

[e]very individual . . . neither intends to promote the public interest, nor knows how much he is promoting it . . . he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. 136

<sup>136.</sup> Adam Smith, The Wealth of Nations, Book IV, Chapter II, 658-65 (Bantam Classics 2003) (1776).