Market Manipulation: Definitional Approaches

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Memorandum

TO: Junior Staffer, U.S. Securities and Exchange Commission
FROM: Chair, Securities and Exchange Commission
RE: Potential changes to the definition of manipulation
DATE: JUNE 2020

The popularity of algorithmic trading has increased substantially over the last decade. About 70 percent of total trading volumes of financial securities in developed markets stems from algorithmic trading.[1] As you know, an algorithm is simply a procedure to be followed in calculations or other operations, including those done by a computer.[2] Algorithmic trading is a process whereby a pre-programmed algorithm is responsible for deciding on price, timing, and volume when trading in financial instruments and securities.[3] In its simplest terms, algorithmic trading uses complex formulas to allow the computer to make decisions on whether to buy or sell financial securities on an exchange and how to go about doing so.[4]

Algorithmic trading is mostly used by institutional investors and big brokerage firms in order to decrease the costs associated with trading.[5] High-frequency trading (HFT) is a subset of algorithmic trading.[6] It allows buys and sells to occur at a very fast rate.[7] Humans do not have the ability to compute and analyze huge volumes of trading data in a short time frame, but a computer can.[8] HFT uses a powerful computer

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[1]   Ravi Kant, *Why algorithmic trading is dangerous*, ASIA TIMES (May 7, 2019), https://www.asiatimes.com/2019/05/opinion/why-algorithmic-trading-is-dangerous/.
[2]   TECHTERMS, *Algorithm*, https://techterms.com/definition/algorithm (last visited Feb. 10, 2020).
[3]   James Chen, *What is Algorithmic Trading?*,INVESTOPEDIA (Oct. 15, 2019), https://www.investopedia.com/terms/a/algorithmictrading.asp (last visited Feb. 10, 2020).
[4]   *Id.*
[5]   *Id.*
[6]   VELVETECH, *The Role of High-Frequency and Algorithmic Trading*, VELVETECH, https://www.velvetech.com/blog/high-frequency-algorithmic-trading/ (last visited Feb. 10, 2020).
[7]   *Id.*
[8]   *Id.*

to implement a large number of orders in fractions of a second based on complex algorithms that are programmed to execute orders based on market conditions important to the programmer.[9]

With the increased popularity surrounding algorithmic trading and high-frequency trading, worries have grown more pronounced about whether our existing regulatory scheme can catch manipulative acts involved in such trading.

Mounting Problems Regarding the Use of Algorithmic Trading

1. 2010 Flash Crash

On May 6, 2010, the Dow Jones Industrial Index fell by about 1,000 points and erased over $862 billion (amounting to 9% of value) from the US stock market.[10] This is deemed a "flash crash" (*i.e.*, large downward price changes in a very short period of time).[11] Public reporting highlighted the role of Waddell & Reed, an American mutual fund, that had placed a sell order for $4.1 billion.[12] That sell order was executed through the use of algorithmic trading.[13]

2. Computer Malfunctions

In 2013, Knight Capital Americas LLC agreed to pay a $12 million settlement for a computer malfunction that disrupted the markets.[14] Despite knowing that a function in its router was defective, Knight Capital kept the function in the router (intending for it not to be used).[15] The router was incorrectly used and as a result, it could not recognize when orders had been filled.[16] The router sent more than 4 million orders into the market and the Fund acquired several billion dollars in unwanted positions.[17] The SEC charged Knight Capital with violating the market access rule, for "[putting] both the firm and the markets at risk."

3. Low Trade-to-Order Submission Ratios

There is a growing concern about HFT generating a large amount of orders and then cancelling them. "Data show the typical trade-to-order submission ratios are between 2% and 4% on the major exchanges. That is, between 25 and 50 orders are generated for every execution."[18] Some believe this is evidence of market manipulation through the use of HFT.[19] Others arguing that the cancellations are not exactly a bad

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9   James Chen, *High-Frequency Trading (HFT)*, Investopedia, https://www.investopedia.com/terms/h/high-frequency-trading.asp (last updated Oct. 10, 2019).
10   *See* Kant, *supra* note 1.
11   *Id.*
12   *Id.*
13   *Id.* Note that there is no government document officially blaming Waddell & Reid, and the Fund maintains that it was not at fault for the crash. *See* Graham Bowley, *Lone $4.1 Billion Sale Led to 'Flash Crash' in May*, NY Times (Oct. 1, 2010), https://www.nytimes.com/2010/10/02/business/02flash.html. The Fund placed a very large order on a day with world turmoil, causing normal institutional sources of liquidity to back away from the market. *See Findings Regarding the Market Events of May 6, 2010: Report of The Staffs of The CFTC and SEC to The Joint Advisory Committee on Emerging Regulatory Issues*, SEC (Sep. 30, 2010), https://www.sec.gov/news/studies/2010/marketevents-report.pdf.
14   US Securities and Exchange Commission, *SEC Charges Knight Capital with Violations of Market Access Rule* (Oct. 16, 2013), https://www.sec.gov/news/press-release/2013-222.
15   *Id.*
16   *Id.*
17   *Id.*
18   Ryan J. Davies & Erik R. Sirri, The Economics of Trading Markets, in SECURITIES MARKET ISSUES FOR THE 21ST CENTURY, 145, at 172 (Merritt B. Fox et al. eds., 2018), https://www.law.columbia.edu/sites/default/files/microsites/capital-markets/securities_market_issues_for_the_21st_century.pdf at 173.
19   *Id.*

phenomenon—noting that the large number of cancellations can lead to market making and price accuracy.[20]

4. Electronic Front-Running

Electronic front-running involves an HFT trader becoming aware of a transaction taking place on one trading venue (e.g., they see a trader trying to execute a certain trade on one stock exchange), and through that deducing that that trade must be on the way to several trading venues.[21] Because HFT involves a speed advantage, they can beat that trader to the other trading venues and execute the trades.[22]

This typically disadvantages the trader that initially placed the order.[23] Although generally not illegal, some people have called this "front-running," which is a phrase that more traditionally describes the illegal practice of a broker-dealer using information about a customer's order to trade for the broker-dealer's own benefit before executing the customer's order.

5. Rebate Arbitrage

Liquidity rebates are small rebates from exchanges that are given to investors upon execution of their limit orders because they have contributed to stock liquidity.[24] HFT traders can receive these rebates by engaging in market making activity, and stock exchanges pay them a "rebate" for filling that role.[25] Rebate arbitrage involves high frequency traders attempting to get liquidity rebates without actually engaging in liquidity-enhancing activity.[26]

6. Slow Market Arbitrage

Some high frequency traders are able to exploit the structure of markets.[27] Stock markets do not adjust instantaneously to price changes.[28] Because HFT moves so quickly, if they are able to predict where the market will move in terms of price in the next millisecond, they can obtain a profit.[29]

Existing Regulatory Scheme—the Need for a Change?

The prevention of market manipulation is a goal of both the Securities Exchange Act of 1934 (SEA) and the Commodity Exchange Act (CEA).[30] The Acts generally prohibit three types of behavior: (1) fraud and misstatements, (2) fictitious trades, and (3) manipulation.

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[20] Tom C.W. Lin, *The New Market Manipulation*, 66 EMORY L.J. 1253, 1288–30 (2017).

[21] Heleen Boonen, *High Frequency Trading, Electronic Frontrunning and Structural Insider Trading Under the EU Market Abuse Regulation: Need for Reform?*, NYU JLB (2017), https://www.nyujlb.org/single-post/2017/11/27/High-Frequency-Trading-Electronic-Frontrunning-and-Structural-Insider-Trading-Under-the-EU-Market-Abuse-Regulation-Need-for-Reform.

[22] *Id.*

[23] Elise Fleischaker, Why Front Running Traders Hurt Fair & Open Markets, NEURENSIC (2016), https://neurensic.com/front-running-traders-hurt-fair-open-markets/.

[24] UNDERSTANDING HIGH-FREQUENCY TRADING TERMINOLOGY, INVESTOPEDIA, https://www.investopedia.com/articles/active-trading/042414/youd-better-know-your-highfrequency-trading-terminology.asp (last updated May 30, 2019).

[25] *Id.*

[26] *Id.*

[27] *Id.*

[28] *Id.*

[29] *Id.*

[30] *See* 7 U.S.C. § 6c; 15 U.S.C. § 78j. The focus of your inquiry should be on manipulation in the national securities exchanges and not, for

1. Fraud and Misstatements

Section 10(b) of the SEA grants the Securities and Exchange Commission (SEC) broad authority to prohibit "manipulative and deceptive devices and contrivances" in relation to the purchase or sale of a security.[31] The SEC's corresponding Rule 10b-5 prohibits fraud, deception, and material misstatements.[32] For claims under section 10(b) and Rule 10b-5, the plaintiff must show that "(1) the defendant made a material misstatement or omission or used a fraudulent device, (2) she did so with scienter (that is, intent), (3) her conduct was related to the purchase or sale of a security, (4) the plaintiff relied on the misstatement, and (5) the plaintiff was harmed."[33]

Congress granted the Commodities Futures Trading Commission (CFTC) the authority to prohibit fraud-based manipulation in 2010 under section 6(c)(1) of the CEA and Rule 180.1.[34] The statute and rule are almost identical to section 10(b) and Rule 10b-5.[35] They prohibit the same conduct, signaling that the CFTC has incorporated Rule 10b-5 jurisprudence with its Rule 180.1.[36]

2. Fictitious Trades

Fictitious trades increase the volume of trading occurring on exchanges with no change in the ownership of the underlying assets. Examples include wash sales, matched orders, and layering/spoofing. Section 9(a)(1) of the SEA and section 4c(a)(1) of the CEA prohibit trades that don't result in a change in ownership. The CFTC statute specifically prohibits spoofing; the SEC brings those cases under Sections 9 and 10 of the SEA.[37]

3. Manipulation

Price manipulation is prohibited in Section 9(a)(2) of the SEA.[38] It forbids transactions in exchange-listed securities whose purpose it is to affect the price of a security in order to induce others to buy the security.[39] Section 6(c)(3) of the CEA also prohibits manipulation of the price of a commodity or swap.[40]

To successfully allege price manipulation against a defendant under the SEA, the plaintiff must prove that "(1) the defendant possessed an ability to influence market prices; (2) an artificial price existed; (3) the defendant caused the artificial price; and (4) the defendant specifically intended to cause the artificial

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example, manipulation in tender offers and the OTC markets, which are also statutorily prohibited.

[31] 15 U.S.C. § 78j. Congress created the SEC in 1934 in order to regulate the securities markets. James Chen, *Securities and Exchange Commission (SEC)*, INVESTOPEDIA, https://www.investopedia.com/terms/s/sec.asp (last updated May 14, 2019). "The SEC promotes full public disclosure, protects investors against fraudulent and manipulative practices in the market, and monitors corporate takeover actions in the United States." *Id.*

[32] *See* 17 C.F.R. § 240.10b-5 (2018).

[33] *See* Gina-Fail S. Fletcher, *Legitimate Yet Manipulative: The Conundrum of Open-Market Manipulation*, 68 DUKE L. J. 479, 498 (2018).

[34] *Id.* Congress created the CFTC in 1974 in order to regulate commodity futures and options markets. James Chen, *Commodity Futures Trading Commission (CFTC)*, INVESTOPEDIA, https://www.investopedia.com/terms/c/cftc.asp (last updated Apr. 9, 2019). Its goals include the promotion of competitive and efficient futures markets and the protection of investors against manipulation, abusive trade practices, and fraud. *Id.*

[35] Fletcher, *supra* note 37.

[36] *Id*. at 498–99.

[37] Spoofing is the process by which a trader places a large order for an asset, without the intention of executing, thereby artificially increasing demand for the asset. *See What Is Spoofing?*, FXCM, https://www.fxcm.com/markets/insights/what-is-spoofing/#:~:text=Spoofing%20is%20an%20illegal%20form,high%20demand%20for%20the%20asset (last visited June 14, 2020).

[38] Section 9(a)(2) [15 U.S.C. 78i(a)(2)] states:
"It shall be unlawful for any person, directly or indirectly, by the use of the mails or any means or instrumentality of interstate commerce, or of any facility of any national securities exchange, or any member of a national securities exchange . . . [t]o effect, alone or with 1 or more other persons, a series of transactions in any security registered on a national securities exchange, any security not so registered, or in connection with any security-based swap or security-based swap agreement with respect to such security creating actual or apparent active trading in such security, or raising or depressing the price of such security, for the purpose of inducing the purchase or sale of such security by others.".

[39] Fletcher, *supra* note 37, at 500.

[40] 7 U.S.C. § 9

price."[41] Specific intent requires that the defendant has "acted (or failed to act) with the purpose or conscious object of causing or effecting a price or price trend in the market that did not reflect the legitimate forces of supply and demand."[42]

Manipulation can harm the market in two ways—"[f]irst, it undermines the market's efficiency by distorting its pricing mechanisms. Second, it impairs the market's integrity because the conduct can lead other market participants to believe the market is unfair."[43] The Supreme Court and the SEC have defined manipulation with a focus on the manipulative intent of the actor. This poses issues for legal actions which involve making trading decisions based on AI technology, such as algorithmic trading/HFT, where it can be difficult to prove an individual's intent.

We would like you to explore whether the Commission should adopt a rule under Section 10(b) of the Exchange Act or change its enforcement/litigation strategies to prohibit manipulation in cases where algorithmic trading or other computerized transactions were utilized and harmful actions were employed.

As you know, the Division of Trading and Markets has been working on issues relating to algorithmic trading and HFT. They have explored various solutions, including minimum resting times and order-to-execution ratios. Discussions of various solutions are included in the Appendix. However, your inquiry is more narrow and should focus on whether the definition of manipulation should change in order to meet challenges posed by these new technologies.

The remainder of this memorandum summarizes the approaches taken thus far by regulators (including the SEC) and approaches suggested by scholars which incorporate intent in some manner. Those approaches would likely be insufficient to catch the harms that can occur through algorithmic trading because of the difficulty of proving traditional intent to engage in manipulation on the part of a computer/algorithm. Also included are appendices with more information that would be helpful to an analysis on this subject. Lastly, I have listed a set of questions you should address below.

Intent-Based Approaches

The Supreme Court and the SEC have adopted an approach to manipulation which focuses principally on whether the intent of the actor was manipulative. In *Ernst & Ernst v. Hochfelder*, the Court stated that manipulation "connotes intentional or willful conduct designed to deceive or defraud investors by controlling or artificially affecting the price of securities."[44] The SEC argued in its *amicus curiae* brief that nothing in Section 10(b) of the Exchange Act "limits its operation to knowing or intentional practices."[45] The SEC also reasoned that "since the 'effect' upon investors of given conduct is the same regardless of whether the conduct is negligent or intentional, Congress must have intended to bar all such practices and not just those done knowingly or intentionally."[46] The Court rejected this argument, stating that the Commission must not have realized that their desired approach would logically lead to imposing liability on actors for conduct that was "faultless," something that there is no way the Commission would want.[47] The Court ruled that investors in a fraudulent securities scheme perpetrated by a company were not

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[41]   Fletcher, *supra* note 37, at 501.
[42]   15 U.S.C. § 78i(a)(2).
[43]   Fletcher, *supra* note 37, at 489.
[44]   Ernst & Ernst v. Hochfelder, 425 U.S. 185, 186 (1976).
[45]   *Id.* at 197–98.
[46]   *Id.* at 198.
[47]   *Id.* ("The logic of this effect-oriented approach would impose liability for wholly faultless conduct where such conduct results in harm to investors, a result the Commission would be unlikely to support.").

entitled to damages under 10b-5 from the company's accounting firm because they had only alleged that the accounting firm *negligently* failed to conduct proper audits of the company.[48]

By 1984, the SEC was on board with an intent-based approach. In that year, the CFTC, Federal Reserve, and the SEC stated that intent was an essential element for all market manipulation claims.[49] One year later, in *Santa Fe Industries v. Green*, the Supreme Court stated that "'Manipulation' is virtually a term of art when used in connection with securities markets, and refers generally to practices, such as wash sales, matched orders or rigged prices, that are intended to mislead investors by artificially affecting market activity."[50] The Court held that "[m]ere instances of corporate mismanagement in which essence of the complaint is that shareholders were treated unfairly by a fiduciary'' is neither deceptive nor manipulative and thus did not violate SEC Rule 10b-5 or the Securities Exchange Act provision.[51]

The D.C. Circuit also takes an approach to manipulation that relies principally on the manipulative intent of the actor. In *Markowski v. S.E.C.*, the United States Court of Appeals for the D.C. Circuit stated that "manipulation can be illegal solely because of the actor's purpose."[52] The Court reasoned that Section 9(a)(2) of the Exchange Act is "quite separate from the subsections of § 9 prohibiting manipulation through fraudulent devices such as wash sales, 15 U.S.C. § 78i(a)(1)(A), matched sales, *id.* at § 78i(a)(1)(B)-(C), and false statements, *id.* at § 78i(a)(4)" and thus Congress must have wanted to enable manipulation to turn solely on the actor's intent.[53] Analyzing transactions that do not involve fictitious trades, the court said, is difficult because "[w]ithout such transactions, the core of the offense can be obscure."[54] Specifically, "[i]t may be hard to separate a 'manipulative' investor from one who is simply over–enthusiastic, a true believer in the object of investment."[55] Thus, "illegality would thus depend entirely on whether the investor's intent was "an investment purpose" or "solely to affect the price of [the] security."[56]

Not everyone agrees with the *Markowski* decision. Gina-Gail S. Fletcher looked to *United States v. Markowski* as an example of why an analysis of intent is insufficient.[57] Fletcher commented that "[a]lthough the court's holding feels correct given the havoc the defendants wreaked on the market, it is disconcerting that the sole stated basis for liability was the defendants' manipulative intent."[58]

Nonetheless, the Second Circuit agrees with the D.C. Circuit. In *Fezzani v. Bear, Stearns & Co.*, the court clarified that manipulation under § 10(b) "[does] not require that reliance by a victim on direct oral or written communications by a defendant must be shown in every manipulation case."[59] The court also stated that it "agree[s] with the propositions of law asserted by the SEC that, in a manipulation claim, a showing of reliance may be based on 'market activity' intended to mislead investors by sending 'a false pricing signal to the market,' upon which victims of the manipulation rely."[60] The court ultimately held there was no manipulation involved in *Fezzani*, because "[t]here is no . . . reliance based on any identifiable

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[48] *Id.* at 215.
[49] Lin, *supra* note 20, at 1301 (citing H.R COMM. OF AGRICULTURE, 98ᵀᴴ CONGRESS, A STUDY OF THE EFFECTS ON THE ECONOMY OF TRADING IN FUTURES AND OPTIONS (Comm. Print 1985) (A report by the Bd. of Gov. of Fed. Res., Comm. Futures Trading Comm., and Sec. & Exch. Comm., to the H.R. Comm. on Agriculture and the H.R. Comm. on Energy & Fin., and to the S. Comm. on Ag., Nutrition and Forestry and the S. Comm. on Bkg., pursuant to Section 23(a) of the Commodity Exchange Act, as amended (Dec. 1984)).
[50] Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 97 (1977).
[51] *Id.* at 474–75.
[52] Markowski v. S.E.C., 274 F.3d 525, 529 (D.C. Cir. 2001).
[53] *Id.*
[54] *Id.* at 528.
[55] *Id.*
[56] *Id.*
[57] Fletcher, *supra* note 33, at 509.
[58] *Id.* at 510.
[59] Fezzani v. Bear, Stearns & Co. Inc., 777 F.3d 566, 571 (2d Cir. 2015).
[60] *Id.* at 571–72.

market, and—given the lack of an allegation that any plaintiff knew of the stock parking or prices used therein—no allegation of reliance upon the parking transactions."[61]

Some courts recognize that it is difficult to make conclusions about intent on its own, because it is a subjective element. Therefore, they may look to the conduct of the defendant in order to find support for a claim of manipulative intent. For example, in granting partial summary judgment, the Court in *S.E.C. v. Masri* explicitly stated that "[t]he defendant's manipulative intent can be inferred from the conduct itself."[62] A recent decision on this issue is *S.E.C v. Lek Securities Corp.*, where the court held that, if the SEC properly showed that the defendants engaged in conduct that artificially raised prices, the court could hold that they violated the Securities and Exchange Act and thus fulfilled the intent requirement.[63]

Fischel/Ross/Easterbrook Approaches

In a famous article, Daniel Fischel and David Ross argued that "the concept of manipulation should be abandoned all together."[64] Specifically, "[f]ictitious trades should be analyzed as a species of fraud. Actual trades should not be prohibited as manipulative regardless of the intent of the trader."[65] The authors analyzed the case of *United States v. Mulheren* to demonstrate that "manipulative trades cannot be distinguished from non-manipulative trades without reference to the intent of the trader . . . [and] . . . the observable characteristics of trades cannot distinguish trades made with bad intent from trades made with good intent."[66]

In that case, defendant Mulheren—who served as the chief trader and general partner of Jamie Securities Co.—was indicted and convicted for manipulating Gulf & Western Industries, Ind. (G&W) stock.[67] The conviction was reversed on appeal in the Second Circuit.[68] Arbitrageur Ivan Boesky owned an "enormous block" of stock in G&W, and the government alleged that Mulheren, through Jamie, sought to raise the price of G&W stock, as a favor to Boesky, above $45 per share so that Boesky could sell his shares "back to the company at that price."[69]

Boesky testified that he called Mulheren and told him that while he "liked" G&W stock he "would not pay more than 45 [dollars] for it" and "it would be great if it traded at 45."[70] Mulheren replied, "I understand."[71] Jamie then bought 50,000 shares of G&W stock at market price, and the order was fulfilled at prices that were below $45 per share.[72] Shortly after that, Jamie placed another order for 25,000 shares of G&W and all shares were purchased at $45 per share. Then, Boesky sold his stock back to G&W at $45 per share, and at the end of the day Jamie sold its position, incurring a loss.[73] The Second Circuit stated that "[t]he meaning of this cryptic conversation is, at best, ambiguous, and we reject the government's contention that this conversation 'clearly conveyed Boesky's request that the price of the stock be pushed up to $45 ... [and Mulheren's] agreement to help.'"[74] The Circuit also concluded that while Mulheren's

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[61] *Id.* at 574.
[62] S.E.C. v. Masri, 523 F.Supp. 2d 361, 367 (S.D.N.Y. 2007).
[63] U.S. SECURITIES AND EXCHANGE COMMISSION, *Court Denies Broker's Attempt to Dismiss Market Manipulation Claims (Aug. 29, 2017)*, https://www.sec.gov/litigation/litreleases/2017/lr23923.htm.
[64] Daniel R. Fischel and David J. Ross, *Should the Law Prohibit 'Manipulation' in Financial Markets?*, 105 HARV. L. R. 503, 507 (1991), https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1554&context=journal_articles.
[65] *Id.*
[66] *Id.* at 533.
[67] United States v. Mulheren, 938 F.2d 364 (2d Cir. 1991).
[68] *Id.* at 372.
[69] *Id.* at 365-66.
[70] *Id.* at 367; Fischel, *supra* note 69, at 533.
[71] *Mulheren*, 938 F.2d at 367.
[72] *Id.*
[73] *Id.* at 368.
[74] *Id.* at 369.

actions could be consistent with him having manipulative intent, they were also consistent with the theory that Mulheren had investment intent.[75] Accordingly, Fischel and Ross argue that analyzing actions for manipulative intent is ambiguous because sorting out good intent from bad intent is too difficult.

The authors also argue that "there is no compelling reason to be concerned about [actors trading with manipulative intent] because it is likely to be self-deterring."[76] This is because of the "low probability that trade-based manipulations can succeed" due to it being difficult for an actor to exert price changes on a security.[77] The authors point out that the latter point is especially prominent in futures markets, where "acquisition of market power requires a large amount of capital" and "for some commodities, such as Treasury securities, this is likely impossible."[78] It would therefore be difficult to acquire enough market power to manipulate the futures market.

Frank Easterbrook took a different approach, and argued that manipulation should be defined as conduct in which profit flows solely from the trader's ability to conceal his position from other traders and the trades do not move prices more quickly in the direction that reflects long-run conditions of supply and demand.[79] Fischel and Ross disagree, stating that the definition is "unsatisfactory . . . [W]hat happens if the trades move prices in one direction because the trader genuinely believes that prices will move in this direction, but the trader turns out wrong and prices ultimately move in the opposite direction? Trading based on a genuine belief that prices will ultimately move in the direction of the trades is the essence of non-manipulative trading."[80]

Professor Wendy Collins Perdue also disagreed with Easterbrook. She stated that his approach suffers "from many . . . practical problems . . . , including the problems of determining 'conditions of supply and demand' and defining the 'long-run.'"[81] Additionally, "in attempting to ascertain the motivation for a trader's desire for secrecy, many courts likely will find themselves lost in a standardless examination of intent."[82] She proposed a definition of manipulation as conduct that is "uneconomical or irrational," regardless of the effect on price.[83]

Intent and Unlawful Conduct/Harm Approaches

Various definitions of manipulation revolve around the actor's intent and the conduct's harm on the marketplace or its unlawfulness. Fletcher argues that the approach of the SEC and CFTC—that transactions are manipulative if the trader intends to manipulate the market—is "fundamentally flawed" because "[t]raders may be treated differently for the same conduct under this approach, and it leaves market actors none the wiser as to when their conduct may be considered manipulative."[84] She argues that "only those open-market transactions that impede the markets' efficiency and undermine their integrity should be deemed manipulative."[85]

Open-market manipulation involves no objectively bad acts and is executed through otherwise lawful transactions on the open market.[86] Additionally, while "[a] defendant's intent is salient to demonstrating

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[75]   *Id.* at 372.
[76]   Fischel, *supra* note 69, at 553.
[77]   *Id.* at 506, 514.
[78]   *Id.* at 547.
[79]   Frank H. Easterbrook, *Monopoly, Manipulation, and the Regulation of Futures Markets*, 59 J. Bus. S103–06 (1986).
[80]   Fischel, *supra* note 69, at 509.
[81]   Wendy Collins Perdue, *Manipulation of Futures Markets: Redefining the Offense*, 56 Fordham L.R 345, 388 (1987).
[82]   *Id.*
[83]   *Id.* at 348.
[84]   Fletcher, *supra* note 37, at 479.
[85]   *Id.*
[86]   *Id.* at 501–02.

the purposefulness of her actions . . . , intent is inadequate as an explanation of why otherwise legitimate transactions are manipulative."[87]

Fletcher proposes a definition that still includes the element of intent. She states that "[a] trader's manipulative intent is important in proving that her conduct was not accidental or negligent and, as such, that the trader is blameworthy."[88] But intent is not the only element (as there needs to be some harm to the market under her definition) because "[a]n exclusive focus on manipulative intent conflates scienter with misconduct."[89]

The Third Circuit has adopted the approach of looking to an actor's intent and unlawful conduct as the test for manipulation. In *GFL Advantage Fund, Ltd. v. Colkitt*, the court stated that "[r]egardless of whether market manipulation is achieved through deceptive trading activities or deceptive statements as to the issuing corporation's value, it is clear that the essential element of the claim is that inaccurate information is being injected into the marketplace." Thus, trading for the purpose (*i.e.*, with the intent) of moving a security's price is not enough to be considered an injection of inaccurate information in the marketplace, and hence it is not, by itself, manipulation. In the case, the court ruled that because "Colkitt has not presented any evidence that GFL did anything but lawfully engage in short sales of National Medical and EquiMed stock," Colkitt's claim of market manipulation fails.[90] Thus, there is currently a split among the federal circuits regarding whether lawful trading activity, without some further unlawful act, can be considered manipulation.

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[87] *Id.* at 510.
[88] *Id.* at 517.
[89] *Id.* at 518.
[90] GFL Advantage Fund, Ltd. v. Colkitt, 272 F.3d 189, 207 (3d Cir. 2001).

Questions

Your briefing with the Chair of the SEC will help her to decide whether to address the rise of new technologies like algorithmic trading and HFT and their potential for market manipulation. If you conclude that the SEC must take steps to address potential manipulation through using new technologies, be sure to explain whether the SEC should change its enforcement/litigation strategies or engage in rulemaking/enact guidance. When doing so, address President Trump's recent Executive Orders regarding guidance documents and Supreme Court precedent regarding fair notice, which are included in the Appendix. The Chair would like to be on board with the Trump Administration and not run afoul of the Executive Orders or Supreme Court precedent.

Please review the materials included in the attached Appendix and brief the incoming Chair. In particular, she is eager to hear your thoughts on the following topics:

- What is market manipulation?
- What are the principal new technological trading strategies?
- To what extent do the principal new technological trading strategies pose problems for the existing doctrine of market manipulation?
- What approaches have scholars and others proposed that define manipulation in terms that do not place emphasis on manipulative intent?
- How should the SEC respond to the problems posed by these new technological trading strategies? Specifically, should the SEC:
    o (1) Keep the traditional rule; or
    o (2) Adjust the traditional rule.
- If you think that the SEC should adjust the traditional rule, should this be done by rulemaking/guidance or by adjusting enforcement and/or litigation strategies? Why?
- If you believe that the SEC should step in with a rule promulgation/guidance, what should the rule/guidance say?
- To what extent would structural reforms be a viable option, vis-à-vis adjusting the definition of manipulation?

Appendices

Background

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