

Spoofing and Layering

Gideon Mark*

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Introduction

This Article examines a broad range of issues associated with spoofing and layering in the futures and securities markets and proposes a set of recommendations to resolve them. Spoofing and layering are forms of market manipulation whereby traders place orders with no intent to execute, primarily to deceive other traders as to the true levels of supply or demand. While the terms are sometimes used interchangeably, layering is best understood as a sophisticated permutation of spoofing, in which traders place multiple trade orders at multiple price tiers, with no intent to execute.¹ Spoofing was expressly prohibited by an amendment of the Commodity Exchange Act in 2010 and such conduct is proscribed—albeit not expressly—by the federal securities laws. Regulatory and criminal anti-spoofing enforcement has sharply accelerated in the last few years. That enforcement has spawned numerous novel unresolved issues² which are addressed herein.

I. Background

This Article begins by examining the futures markets, the significance of spoofing and layering, the harm associated with such conduct, the connection between spoofing, layering, and high-frequency trading, and the essential differences between spoofing, layering, and other similar forms of trading—some of which are proscribed under federal law and some of which are not.

A. The Futures Markets

Spoofing and layering take place primarily but not exclusively in the futures markets. Futures are a major subset of the larger market for derivatives, which are financial products that derive their value from the change in value of underlying assets or the occurrence of external events. Derivatives played a central role in the 2008 financial crisis,³ but they also play an essential role in economic growth, by pricing commercial risk and transferring it in efficient

* Associate Professor of Business Law, University of Maryland Robert H. Smith School of Business; gmark@rhsmith.umd.edu. Professor Mark holds degrees from Brandeis University, Columbia University, Harvard University, New York University, and the University of California.

¹ See Clifford C. Histed & Gilbert A. Perales, *SEC Sends a Stern Reminder that it is Serious About Punishing ‘Spoofing’ and ‘Layering’ Schemes in the Securities Markets*, NAT’L L. REV. at n.4 (Apr. 25, 2017), <https://www.natlawreview.com/article/sec-sends-stern-reminder-it-serious-about-punishing-spoofing-and-layering-schemes> (“The terms ‘layering’ and ‘spoofing’ are often used interchangeably to describe similar manipulative trading behavior—namely, offering to buy or sell a security or futures contract with the intent to cancel the order before it is executed. Layering, however, is a specific form of spoofing that involves placing multiple orders at different price levels, or ‘layers.’”); Trillium Management, LLC, *What is the Difference Between Layering and Spoofing?*, <https://www.trlm.com/knowledgebase/makes-spoofing-different-layering/> (“Layering is a variant of spoofing. . . .”) (last visited Mar. 15, 2019).

² See David I. Miller, Joshua B. Sterling & Ari Micah Selman, *The U.S. Government’s Charge Against ‘Spoofing,’* 21 (No. 16) WESTLAW JOURNAL, DERIVATIVES (July 1, 2015), <https://www.morganlewis.com/~media/files/publication/outside%20publication/article/westlaw-derivatives-charge-against-spoofing-july2015.ashx> (observing that spoofing enforcement is a “novel, largely untested area of the law”) [hereinafter Charge Against Spoofing].

³ Karen Freifeld, *Misconduct Rife in Derivatives—Ex-CFTC Enforcement Chief*, REUTERS (Mar. 24, 2017, 7:24 AM), <https://www.reuters.com/article/us-cftc-enforcement-goelman-idUSKBN16V1D0?il=0>.

ways.⁴ Derivative prices reflect the aggregate opinions of market participants about the present and future values of commodities.⁵ Derivatives have become commonplace. Derivative instruments include futures, as well as swaps and options on commodities. The derivatives markets are governed by the Commodity Exchange Act (CEA),⁶ which very broadly defines “commodities” to include “all services, rights, and interests . . . in which contracts for future delivery are presently or in the future dealt in.”⁷ In effect, a commodity is any product which is or may in the future be traded on a futures exchange.⁸ The CEA thus governs commodity futures contracts, which are executory contracts for the purchase or sale of a commodity executed at a specific point in time with delivery of the commodity postponed to a future date.⁹ The current version of the CEA governs the trading of such contracts and grants to the Commodity Futures Trading Commission (CFTC, Commission) the authority to implement the regulatory regime established therein.¹⁰

The CFTC has regulated commodity futures markets in the United States since 1974, when the Commodity Futures Trading Commission Act¹¹ was enacted to amend the CEA.¹² Subject to a few limited exceptions, futures contracts are within the exclusive jurisdiction of the Commission,¹³ notwithstanding the continuing convergence between the securities and derivatives markets.¹⁴ The futures industry traces its origin to agricultural commodities trading in the 1860s, primarily in wheat, corn, and cotton, but it has become increasingly complex since the creation of the CFTC more than a century later.¹⁵

Congress enacted the CEA for the purpose of preventing, deterring, and redressing price manipulation of commodity futures and options contracts.¹⁶ The statute had a generic anti-

⁴ *CFTC: A New Direction Forward*, Remarks of Acting Chairman J. Christopher Giancarlo before the 42nd Annual International Futures Industry Conference in Boca Raton, Florida (Mar. 15, 2017), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo-20> [hereinafter *A New Direction*].

⁵ Charles Mills & Karen Dildei, *The Necessity of Price Artificiality in Manipulation and Attempted Manipulation Claims*, 37 FUT. & DERIV. L. REP. 1, 7 (Sept. 2017). <https://www.steptoelaw.com/images/content/1/3/v2/138636/FDLR-37-8-Art1-FINAL.pdf>.

⁶ P.L. 74-675, 49 Stat. 1491 (1936).

⁷ 7 U.S.C. § 1a(9) (2018).

⁸ See *CFTC v. American Bd. of Trade, Inc.*, 803 F.2d 1242, 1248 (2d Cir. 1986) (“[A]nything other than onions could become a ‘commodity’ . . . simply by its futures being traded on some exchange.”). Both onions and motion picture box office receipts are currently excluded from the definition of a commodity. See 7 U.S.C. § 1a(9) (2018).

⁹ *In re Amaranth Natural Gas Comm. Litig.*, 730 F.3d 170, 173 (2d Cir. 2013).

¹⁰ *Troyer v. Nat’l Futures Ass’n*, 290 F. Supp. 3d 874, 880 (N.D. Ind. 2018).

¹¹ P.L. 93-463, 88 Stat. 1389 (1974).

¹² See *Mission & Responsibilities*, CFTC, <https://www.cftc.gov/About/MissionResponsibilities/index.htm> (last visited Mar. 15, 2019).

¹³ See 7 U.S.C. § 2(a)(1)(A) (2018); *Hunter v. F.E.R.C.*, 711 F.3d 155, 157 (D.C. Cir. 2013) (“Stated simply, Congress crafted CEA section 2(a)(1)(A) to give the CFTC exclusive jurisdiction over transactions conducted on futures markets like the NYMEX.”).

¹⁴ *Findings Regarding The Market Events of May 6, 2010*, Report of the Staffs of the CFTC and SEC to the Joint Advisory Comm. on Emerging Regulatory Issues 6 (Sept. 30, 2010), <https://www.sec.gov/news/studies/2010/marketevents-report.pdf> (noting continuing convergence) [hereinafter *Market Events Findings*].

¹⁵ See *Mission & Responsibilities*, CFTC, <https://www.cftc.gov/About/MissionResponsibilities/index.htm> (last visited Mar. 15, 2019).

¹⁶ See *Leist v. Simplot*, 638 F.2d 283, 304 (2d Cir. 1980), *aff’d sub nom. Merrill Lynch, Pierce, Fenner & Smith Inc. v. Curran*, 456 U.S. 353 (1982).

manipulation provision¹⁷ and an anti-fraud provision,¹⁸ both of which have been amended since enactment. Because conduct involving manipulation in a commodity futures market takes numerous forms, it was left undefined when the CEA was enacted.¹⁹

B. What Are Spoofing and Layering, and How Common is Such Conduct?

There is no universally accepted definition of the term, but some conduct is commonly recognized as spoofing.²⁰ A basic spoofing scheme involves a trader entering a large order on one side of the market that the trader intends to cancel prior to execution and contemporaneously entering multiple small orders on the other side that the trader intends to fill. The large order creates an illusion of market depth and generates a response from other market participants that benefit the trader's small positions.²¹ A response is generated because many participants base their market strategies on their perceptions of supply and demand at various price levels.

These are rarely isolated events. Spoofing and layering schemes often extend for several years and include the placement of thousands or millions of spoof or layered orders.²² One 2018 CFTC enforcement action concerned more than 36,000 spoof orders.²³ An earlier enforcement action by the Securities and Exchange Commission (SEC) involved more than 325,000 layered transactions that corresponded to the entry of more than eight million layered orders.²⁴ The results can be major losses for spoofed traders. In one case in which co-defendants pled guilty in October 2018, market participants who traded futures contracts in the spoofed markets during the period that prices were distorted incurred losses of over \$60 million.²⁵

Layering is a more sophisticated version of spoofing. In a common layering scheme multiple limit orders²⁶ are entered on one side of the market at various price points, with no

¹⁷ See 7 U.S.C. § 13(a) (2018) (prohibiting manipulation).

¹⁸ See 7 U.S.C. § 6b (2018) (prohibiting fraud).

¹⁹ Bernard Persky & Gregory Ascioia, *Analyzing Proper Pleading Standard for Commodity Manipulation Claims*, N.Y. L.J. (Feb. 10, 2009); <https://www.labaton.com/blog/Analyzing-Proper-Pleading-Standard-For-Commodity-Manipulation-Claims.cfm>.

²⁰ *Id.*

²¹ Zach Brez, et al., *Recent Developments in CFTC Enforcement*, Bloomberg BNA, 48 SEC. REG. & L. REP. 2189 (Nov. 21, 2016).

²² See, e.g., Plea Agreement, ¶ 7, *United States v. Zhao*, Case No. 18 CR 24 (N.D. Ill. Dec. 26, 2018) (stating that defendant's spoofing scheme extended for almost four years and involved thousands of orders); U.S. Dep't of Justice, Justice News, *Three Traders Charged, and Two Agree to Plead Guilty, in Connection with over \$60 Million Commodities Fraud and Spoofing Conspiracy* (Oct. 12, 2018), <https://www.justice.gov/opa/pr/three-traders-charged-and-two-agree-plead-guilty-connection-over-60-million-commodities-fraud> (noting that defendants' alleged spoofing scheme in operation from 2012-14 on Chicago Mercantile Exchange and Chicago Board of Trade involved thousands of spoof orders).

²³ See Complaint at 13, *CFTC v. Mohan*, Case No. 4:18-cv-00260 (S.D. Tex. Jan. 28, 2018).

²⁴ In the Matter of Hold Bros. On-Line Inv. Servs., LLC, SEC File No. 3-15046, SEC Release Nos. 67924, 30213, at 6 (Sept. 25, 2012).

²⁵ See U.S. Dep't of Justice, Justice News, *Three Traders Charged, and Two Agree to Plead Guilty, in Connection with over \$60 Million Commodities Fraud and Spoofing Conspiracy* (Oct. 12, 2018), <https://www.justice.gov/opa/pr/three-traders-charged-and-two-agree-plead-guilty-connection-over-60-million-commodities-fraud>.

²⁶ In a limit order the customer specifies a minimum sale price or maximum purchase price, whereas a customer expects a market order will be filled at the market price. U.S. Commodity Futures Trading Comm'n, *CFTC Glossary*, <https://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/index.htm#L> (last visited Mar. 15, 2019). Limit orders comprise a significant percentage of all orders entered in securities and futures

intent to execute. Again, the usual objective is to create the appearance of a change in the levels of supply and demand, thereby artificially moving the price of the commodity or security. An order is then executed on the opposite side of the market at the artificially created price, and the multiple prior orders are cancelled.²⁷

Spoofing and layering rest on the fundamental microeconomic principle that increased supply drives prices down and increased demand drives prices up, but the trading techniques have evolved and become more complex in recent years.²⁸ More refined versions include spoofing with vacuuming, collapsing of layers, flipping, and the spread squeeze.²⁹ Increased complexity has magnified the detection problem.

The trader's motivation in a spoofing or layering scheme is usually, but not always, to manipulate the market for profit. A secondary motivation is to test the market's reaction to certain types of orders. A recent example of the latter occurred in September 2018 when Mizuho Bank agreed to pay a civil penalty of \$250,000 to resolve allegations that it engaged in multiple acts of spoofing on the Chicago Mercantile Exchange (CME)—the world's largest futures exchange—and Chicago Board of Trade (CBOT).³⁰ The CFTC alleged that Mizuho's trader placed spoof orders to test market reaction to his trading in anticipation of having to hedge Mizuho's swaps positions with futures at a later date.³¹ The CFTC did not allege that the trader executed or even placed genuine orders that benefitted from the spoof large orders. In all of the CFTC's prior spoofing cases it had alleged that the misconduct involved both spoof and genuine orders.³² But according to the CFTC, a trader's conduct is unlawful whether his motivation is to manipulate the market or to gauge the market's reaction.³³ That position, while tenable, has not been tested in court.

Spoofing may have been occurring at least since the advent of electronic trading in the late 1960s in the financial markets,³⁴ and today virtually all trading in both equity and futures

markets. See Michael Morelli, Comment, *Regulating Secondary Markets in the High Frequency Age: A Principled and Coordinated Approach*, 6 MICH. BUS. & ENTREPRENEURIAL L. REV. 79, 91 (2016) ("Most markets are set up as electronic limit order books.").

²⁷ See U.S. Sec. and Exch. Comm'n, Release No. 34-79361, File No. SR-FINRA-2016-043, at 5 n.11 (Nov. 21, 2016), <https://www.sec.gov/rules/sro/finra/2016/34-79361.pdf>.

²⁸ Nasdaq, *The Top 3 Market Abuse Behaviors that Exchanges Should be Monitoring For*, <https://business.nasdaq.com/tech/tech-resources/resource-library/index.html> (referencing advanced layering techniques) (last visited Mar. 15, 2019).

²⁹ See Neurensic, Inc., *Spoofing Similarity Model* (Sept. 13, 2016), <http://neurensic.com/spoofing-similarity-model/> (describing these advanced techniques).

³⁰ U.S. Commodity Futures Trading Comm'n, Press Release No. 7800-18, *CFTC Finds Mizuho Bank, Ltd. Engaged in Spoofing of Treasury Futures and Eurodollar Futures* (Sept. 21, 2018), <https://www.cftc.gov/PressRoom/PressReleases/7800-18>.

³¹ See *In re Mizuho Bank Ltd.*, Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings, and Imposing Remedial Sanctions, CFTC Docket No. 18-38 (Sept. 21, 2018).

³² Katherine Cooper & Elizabeth Lan Davis, *2 New Cases Showcase CFTC Spoofing Theories*, LAW360 (Sept. 25, 2018, 3:31 PM EDT), <https://www.law360.com/articles/1086185/2-new-cases-showcase-cftc-spoofing-theories>.

³³ See U.S. Commodity Futures Trading Comm'n, Press Release No. 7800-18, *CFTC Finds Mizuho Bank, Ltd. Engaged in Spoofing of Treasury Futures and Eurodollar Futures* (Sept. 21, 2018), <https://www.cftc.gov/PressRoom/PressReleases/7800-18>.

³⁴ Kenneth A. McCracken & Christine Schleppegrell, *The CFTC's Manipulative and Disruptive Trading Authority in an Algorithmic World*, 35 FUTURES & DERIV. L. REP. (Apr. 2015),

markets is done using computers.³⁵ Indeed, many exchanges have closed their trading floors. The era of electronic trading has created an environment in which spoofing and layering can flourish. Former CFTC Director of Enforcement Aitan Goelman has stated that spoofing is widespread³⁶ and former CFTC Commissioner Timothy Massad often identified spoofing in public remarks as a particular area of focus for the Commission, during his tenure from 2014-17.³⁷ In 2017, the CFTC shifted its Market Surveillance Unit—which includes economists, statisticians, and quantitative analysts—from the Division of Market Oversight to the Division of Enforcement in order to more effectively identify and prosecute spoofing and other forms of manipulation.³⁸ The switch reflects the data-centric approach increasingly pursued by the CFTC. In turn, the new approach reflects the fact that modern markets are increasingly data-driven and data-sensitive.³⁹

In January 2018 the CFTC announced the establishment of a Spoofing Task Force.⁴⁰ The Task Force—a coordinated effort across the CFTC’s Division of Enforcement, with members from the Commission’s offices in Chicago, Kansas City, New York, and Washington, D.C.—was designed, according to the CFTC, “to root out spoofing from our markets.”⁴¹ That same month the CFTC announced the settlement of spoofing enforcement actions involving Deutsche Bank, UBS, and HSBC (with fines ranging up to \$30 million) and the filing of civil complaints alleging spoofing and manipulation against six individuals and one company in coordination with the Department of Justice (DOJ) and the Federal Bureau of Investigation.⁴² The DOJ brought criminal charges against the same individuals, plus two others.⁴³ This constituted the largest coordinated enforcement action with criminal authorities in the history of the CFTC.⁴⁴ The prosecutions also were significant for the DOJ, which characterized them as the largest

<https://www.dechert.com/content/dam/dechert%20files/publication/2015/4/Derivatives%20Law%20Report%20Publication%20April%202015.pdf>.

³⁵ Robert W. Cook (President and CEO, FINRA), *Equity Market Surveillance Today and the Path Ahead* (Sept. 20, 2017), <https://www.finra.org/newsroom/speeches/092017-equity-market-surveillance-today-and-path-ahead> (referring to equity markets); Brez, *supra* note 21 (referring to markets overseen by CFTC).

³⁶ See Erika Kelton, *Alarming News about Derivatives Markets from Former CFTC Enforcement Chief*, FORBES.COM (Mar. 29, 2017, 4:54 PM), <https://www.forbes.com/sites/erikakelton/2017/03/29/alarming-news-about-derivatives-markets-from-former-cftc-enforcement-chief/#5939b6796332>. See also John I. Sanders, Comment, *Spoofing: A Proposal for Normalizing Divergent Securities and Commodities Futures Regimes*, 51 WAKE FOREST L. REV. 517, 519 (2016) (stating that spoofing “appears to be a widespread practice”). The absence of reliable data concerning the extent of spoofing and layering reflects the general absence of such data concerning market manipulation. See Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rauterberg, *Stock Market Manipulation and its Regulation*, 35 YALE J. ON REG. 67, 77 (2018) (“The fact is that we know relatively little about the extent of manipulation in the equities markets.”) [hereinafter *Stock Market Manipulation*].

³⁷ See, e.g., Remarks of Timothy G. Massad at the CME Global Financial Leadership Conference 6 (Nov. 18, 2014), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-51> [hereinafter Massad 2014 Remarks].

³⁸ See A New Direction, *supra* note 4.

³⁹ Tom C.W. Lin, *The New Market Manipulation*, 66 EMORY L.J. 1253, 1297 (2017).

⁴⁰ See U.S. Commodity Futures Trading Comm’n, Statement of CFTC Director of Enforcement James McDonald (Jan. 29, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/mcdonaldstatement012918> [hereinafter McDonald Statement].

⁴¹ See *id.*

⁴² See Testimony of CFTC Chairman J. Christopher Giancarlo before the Senate Comm. on Appropriations Subcomm. on Financial Services and General Government (June 5, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo47>.

⁴³ See *id.*

⁴⁴ See *id.*

futures market criminal enforcement action in its history.⁴⁵ Subsequently, in September 2018, one analysis concluded that the CFTC’s “campaign against spoofing is continuing and unabated.”⁴⁶ By the close of the fiscal year, on September 30, 2018, the CFTC’s Division of Enforcement had brought more actions involving spoofing and manipulation than in any prior year.⁴⁷ From 2009 to 2017 the CFTC averaged six such cases per year⁴⁸ and in 2018 it filed 26 cases.⁴⁹

C. Are Spoofing and Layering Harmful?

There is general, but not universal, agreement that spoofing and layering are harmful and should be proscribed. The DOJ has noted that spoofing “poses a significant risk of eroding confidence in U.S. markets.”⁵⁰ Goelman has stated that “protecting the integrity and stability of the U.S. futures markets is critical to ensuring a properly functioning financial system. Aggressive prosecution of spoofing is an important part of that mission.”⁵¹ Market integrity is infrequently defined,⁵² but it is a core objective for securities and commodities regulators. The CFTC’s budget request for fiscal year 2018 identified preservation of market integrity and protection of customers from harm as the “overarching goals” of the Commission’s enforcement function.⁵³ One key aspect of market integrity is freedom from manipulation. Price and quantity are major sources of market information, fictitious bids and offers send false signals to other market participants, and such false signaling is manipulative.⁵⁴ Accordingly, the prosecution of

⁴⁵ See *id.* See also James G. Lundy & Antonio M. Pozos, *The CFTC and DOJ Crack Down Harder on Spoofing & Supervision*, SECURITIES LAW PERSPECTIVES (Feb. 6, 2018), <http://securitieslawperspectives.com/cftc-doj-crack-harder-spoofing-supervision/> (noting that spoofing has become an area of focus for Main Justice and for the DOJ’s Criminal Fraud Section in particular).

⁴⁶ Cooper & Davis, *supra* note 32. See also Charge Against Spoofing, *supra* note 2 (noting that spoofing has become “a priority among prosecutors and regulators alike”).

⁴⁷ *Speech of Enforcement Director James M. McDonald Regarding Enforcement Trends at the CFTC*, NYU School of Law: Program on Corporate Compliance & Enforcement (Nov. 14, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamcdonald1>.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ See U.S. Dep’t of Justice, Press Release, *Eight Individuals Charged with Deceptive Trading Practices Executed on U.S. Commodities Markets* (Jan. 29, 2018), <https://www.justice.gov/opa/pr/eight-individuals-charged-deceptive-trading-practices-executed-us-commodities-markets>.

⁵¹ U.S. Commodity Futures Trading Comm’n, Press Release No. 7171-15, *CFTC Charges United Arab Emirates Residents Heet Khara and Nasim Salim with Spoofing in the Gold and Silver Futures Markets* (May 5, 2015), <https://www.cftc.gov/PressRoom/PressReleases/pr7171-15>.

⁵² Janet Austin, *What Exactly is Market Integrity? An Analysis of One of the Core Objective of Securities Regulation*, 8 WM. & MARY BUS. L. REV. 215, 219 (2017) (“Within the finance discipline, market integrity is often discussed but not often defined. When it is defined it tends to be defined relatively narrowly, as a market where information is equal or a market free from insider trading and market manipulation.”).

⁵³ U.S. Commodity Futures Trading Comm’n, Budget Request Fiscal Year 2018, at 1 (May 2017), <https://www.cftc.gov/sites/default/files/reports/presbudget/2018/index.html> [hereinafter 2018 Budget Request]. See also Austin, *supra* note 52, at 219 (“[G]overnments, securities regulators, and even the G20 have adopted market integrity as a core objective for securities regulation.”).

⁵⁴ Paul Peterson, *Still More on ‘Who’s Spoofing Whom?’*, 6 FARMDAILY (Jan. 8, 2016), <https://ageconsearch.umn.edu/bitstream/232194/2/fdd010816.pdf>. See also U.S. Dep’t of Justice, Press Release, *Acting Assistant Attorney General John P. Cronan Announces Futures Markets Spoofing Takedown* (Jan. 29, 2018), <https://www.justice.gov/opa/speech/acting-assistant-attorney-general-john-p-cronan-announces-futures-markets-spoofing> (“Spoofed orders alter the appearance of supply and demand, and manipulate otherwise efficient markets.”).

spoofing enhances market integrity, by preventing, deterring, and redressing manipulative conduct.⁵⁵

Market stability—the other item noted by Goelman—also is vital for regulators, because instability discourages trading by legitimate market participants.⁵⁶ Spoofing has caused instability,⁵⁷ in both United States and foreign markets. There is a general consensus that spoofing directly contributed to the May 6, 2010 flash crash.⁵⁸ That afternoon, the Dow Jones Industrial Average plunged 998.5 points (roughly six percent) in a few minutes,⁵⁹ thereby erasing nearly \$1 trillion in value from U.S. stocks. This was the largest one-hour decline in the long history of the Dow Jones.⁶⁰ By the end of the day on May 6 major indices in both futures and securities markets mostly recovered, to close at losses of about three percent from the prior day,⁶¹ but the crash exacted a huge toll on investor confidence. Similarly, in 2015 Chinese officials believe they detected 24 instances of spoofing as shares on the Shanghai and Shenzhen stock exchanges plunged.⁶²

Flash crashes may be uncommon but flash events or mini-flash crashes are not. An analysis conducted by the CFTC in 2015 used a somewhat arbitrary definition of flash events as episodes in which the price of a contract moved at least 200 basis points within a trading hour but returned to within 75 basis points of the original or starting price within the same hour. The CFTC found, *inter alia*, that corn, the largest grain futures market, averaged more than five such events per year over the five years preceding the study.⁶³ In addition, in 2015 there were 35

⁵⁵ See U.S. Commodity Futures Trading Comm’n, Remarks of Commissioner Rostin Behnam before Energy Risk USA, Houston, Texas (May 15, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opabehnam6> (“Spoofing introduces false information into the market, undermining market integrity and harming those who play by the rules and use the markets to hedge their risks.”) [hereinafter Behnam Remarks].

⁵⁶ U.S. Commodity Futures Trading Comm’n, Press Release No. 7264-15, *CFTC Charges Chicago Trader Igor B. Oystacher and His Proprietary Trading Company, 3 Red Trading LLC, with Spoofing and Employment of a Manipulative and Deceptive Device While Trading E-Mini S&P 500, Cooper, Crude Oil, Natural Gas, and VIX Futures Contracts* (Oct. 19, 2015), <https://www.cftc.gov/PressRoom/PressReleases/pr7264-15>.

⁵⁷ See Deniz Aktas, *Developments in Banking Law—Spoofing*, 33 B.U. REV. BANKING & FIN. L. 89, 92 (2013-14) (“The ultimate outcome of spoofing is increased market instability.”).

⁵⁸ See, e.g., CFTC v. Nav Sarao Futures Ltd. PLC, Case No. 15-cv-3398, 2016 WL 8257513, at *8-9 (N.D. Ill. Nov. 14, 2016) (linking defendants’ spoofing to flash crash); Testimony of CFTC Chairman Timothy G. Massad before the U.S. Senate Comm. on Agriculture, Nutrition & Forestry (May 14, 2015), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-22> (observing that Sarao’s spoofing “contributed to market conditions that led to the flash crash of 2010”) [hereinafter Massad 2015 Testimony].

⁵⁹ Graham Bowley, *U.S. Markets Plunge, Then Stage a Rebound*, N.Y. TIMES (May 6, 2010), <https://www.nytimes.com/2010/05/07/business/07markets.html>.

⁶⁰ Alexander Abedine, Note, *The Symbiosis of High Frequency Traders and Stock Exchanges: A Macro Perspective*, 14 N.Y.U. J.L. & BUS. 595, 633 (2018).

⁶¹ Market Events Findings, *supra* note 4, at 1.

⁶² Matthew Leising, Mira Rojanasakul & Adam Pearce, *How to Catch a Spoofer*, BLOOMBERG.COM (Sept. 4, 2015), <https://www.bloomberg.com/graphics/2015-spoofing/>. Stocks declined 8.5% in one day, the largest single-day drop in the Shanghai Composite in eight years. *The Causes and Consequences of China’s Market Crash*, THE ECONOMIST (Aug. 24, 2015), <https://www.economist.com/news/2015/08/24/the-causes-and-consequences-of-chinas-market-crash>.

⁶³ See Remarks of Chairman Timothy Massad before the Conference on the Evolving Structure of the U.S. Treasury Market (Oct. 21, 2015), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-30> [hereinafter Massad 2015 Remarks].

intraday flash events just for WTI crude oil futures.⁶⁴ A separate SEC investigation found that Merrill Lynch caused at least 15 mini-flash crashes from late-2012 to mid-2014.⁶⁵

Such instability discourages trading, which reduces market liquidity. The extensive spoofing scheme of high-frequency trader Michael Coscia—carried out hundreds of times a day in 2011⁶⁶—resulted in at least one significant participant withdrawing from the marketplace.⁶⁷ More generally, CFTC Director of Enforcement James McDonald observed in 2018 that “[s]poofing drives traders away from our markets, reducing the liquidity needed for these markets to flourish.”⁶⁸

The government’s stance on the harm stemming from spoofing and layering has been disputed. One perspective is that the impact of spoofing is confined, because spoofing victims tend to be experienced high-frequency traders who quickly realize they have been victimized and take prompt action to mitigate their damages.⁶⁹ High-frequency trading (HFT) constitutes a subset of algorithmic trading⁷⁰—which itself involves the use of increasingly sophisticated programmed electronic trading instructions—and is most accurately categorized as a methodology or technique, rather than as a discrete strategy. High frequency traders utilize quantitative and algorithmic methodologies to maximize the speed of their market access and trading strategies.⁷¹ They may execute hundreds of trades in the space of milliseconds (1/1000th of a second) or microseconds (1/1 millionth of a second).⁷² No universal or authoritative definition of HFT exists,⁷³ but HFT differs from the remainder of the broader category of algorithmic trading in terms of this hyper-speed/ultra-low latency and high volume.⁷⁴ In part, the speed of HFT reflects the market reality that futures prices often change significantly in one second or less.

⁶⁴ *Id.*

⁶⁵ See U.S. Sec. and Exch. Comm’n, Press Release, No. 2016-192, *Merrill Lynch Charged with Trading Controls Failures that Led to Mini-Flash Crashes* (Sept. 26, 2016), <https://www.sec.gov/news/pressrelease/2016-192.html>.

⁶⁶ See *United States v. Coscia*, 866 F.3d 782, 789 (7th Cir. 2017).

⁶⁷ See Alex Lincoln-Antoniou & Mauro Wolfe, *HFT Spoof that Wasn’t Funny*, COMPLIANCE MONITOR (2013), https://www.duanemorris.com/articles/static/wolfe_compliancemonitor_0913.pdf.

⁶⁸ McDonald Statement, *supra* note 40.

⁶⁹ See, e.g., Peter J. Henning, *The Government’s New Strategy to Crack Down on ‘Spoofing,’* N.Y. TIMES (Sept. 4, 2018) (“The futures market for precious metals is populated by sophisticated traders who understand that others are trying to game the system to generate profits.”); James A. Overdahl & Kwon Y. Park, *The Exercise of Anti-Spoofing Authority in U.S. Futures Markets: Policy and Compliance Consequences*, 36 No. 5 FUTURES & DERIV. L. REP. 1, 9 (May 2016), <http://deltastrategygroup.com/wp-content/uploads/2016/07/FDLR-Article-Published-1.pdf> (citing Craig Pirrong, Professor of Finance, Univ. of Houston).

⁷⁰ *United States v. Coscia*, 866 F.3d 782, 786 n.4 (7th Cir. 2017).

⁷¹ Market Events Findings, *supra* note 4, at 45.

⁷² Kristin N. Johnson, *Regulating Innovation: High Frequency Trading in Dark Pools*, 42 J. CORP. L. 833, 857 (2017).

⁷³ Lazaro I. Vazquez, *High Frequency Trading: Is Regulation the Answer?*, 17 WAKE FOREST J. BUS. & INTELL. PROP. L. 151, 155 (2017) (“Together, the SEC and CFTC have refused to provide a precise definition of HFT. Both agencies define HFT by a subset of characteristics and attributes.”).

⁷⁴ Gaia Balp & Giovanni Strampelli, *Preserving Capital Markets Efficiency in the High-Frequency Trading Era*, 2018 U. ILL. J.L. TECH. & POL’Y 349, 354. Latency refers to the elapsed time between placement of a limit or market order on an electronic trading system and execution of that order.

Spoofing has been described as bait for HFTs⁷⁵ and the bait is often snatched. In 2015 the DOJ indicted high-frequency London-based trader Navinder Singh Sarao, who spoofed on the CME, for his role in causing the 2010 flash crash. Sarao pled guilty to spoofing charges in November 2016⁷⁶ and that same month settled a related civil action commenced by the CFTC.⁷⁷ But as noted by one critic, “Sarao’s dupes were other ‘flash boys’”⁷⁸ More generally, a 2017 report by Nasdaq concluded that “[g]iven the rapid nature of the activity, in highly liquid markets, often the ‘victim’ of spoofing is an [automated trading system].”⁷⁹

A more sophisticated version of the foregoing argument is that spoofing should be allowed as an antidote to the specific HFT order-anticipation strategy of front-running. HFT front-runners use their access to proprietary data feeds to profit by gleaning the intentions of legitimate traders and jumping the queue in front of their orders. This information asymmetry harms the non-front-running market participants by inducing them to buy or sell at less favorable prices.⁸⁰ Front-running has increased in the HFT era.⁸¹ While it is often profitable against traditional orders, when a front-running HFT algorithm jumps in front of a spoof order, the spoofed trader may lose money. In this sense, spoofing acts as a critical check on destabilizing front-running, without harming legitimate traders. One observer noted: “If front-running is allowed to exist, spoofing is its best remedy.”⁸²

The foregoing analysis is flawed. First, traditional front-running, which refers to trading based on material, non-public advance knowledge of block transactions (generally, 10,000 shares or more of stock),⁸³ already is banned by the SEC and Financial Industry Regulatory Authority

⁷⁵ Roy Strom, *To Catch a Spoofers*, CHICAGO LAWYER (Apr. 1, 2016), <https://www.chicagolawyer.com/elements/pages/print.aspx?printpath=/Archives/2016/04/spoofing-April16&classname=tera.gn3article>.

⁷⁶ Consent Order of Permanent Injunction, Civil Monetary Penalty, and Other Equitable Relief Against Navinder Singh Sarao, CFTC v. Nav Sarao Futures Ltd., Case No. 15-cv-3398 (N.D. Ill. Nov. 14, 2016).

⁷⁷ See Jason Grimes & Anne M. Termine, Covington & Burling LLP, “Flash Crash’ Derivatives Trader Settles Spoofing Case (Nov. 24, 2016), <https://www.covfinancialservices.com/2016/11/flash-crash-derivatives-trader-settles-spoofing-case/>.

⁷⁸ Brown Rudnick, “Spoofing’ Almost Crashed the Stock Market, but is it Fraud? (Apr. 28, 2015), <http://www.brownrudnick.com/spoofing-almost-crashed-the-stock-market-but-is-it-fraud/>. See also Matt Levine, *Prosecutors Catch a Spoofing Panther*, BLOOMBERG VIEW (Oct. 2, 2014, 5:15 PM), <https://www.bloomberg.com/opinion/articles/2014-10-02/prosecutors-catch-a-spoofing-panther> (“Spoofing works . . . primarily against high-frequency traders who trade based on what the order book tells them.”). An order book is an electronic list of buy and sell orders for specific financial instruments organized by price level. INVESTOPEDIA, Order Book (updated Apr. 1, 2018), <https://www.investopedia.com/terms/o/order-book.asp>. It is visible to every trader on the exchange using the book.

⁷⁹ Alan Jukes, Nasdaq, *Visualizing the ‘Signature’ of Spoofing* 1 (2017), <http://nasdaqtech.nasdaq.com/Spoofing-WP-IB>.

⁸⁰ See Lin, *supra* note 39, at 1283 (“Front running distorts the fair execution of trades in the marketplace. . . .”). But see Rishi K. Narang, *High-Frequency Traders Can’t Front-Run Anyone*, CNBC.COM (Apr. 13, 2014, 10:29 AM ET), <https://www.cnbc.com/2014/04/03/high-frequency-traders-cant-front-run-anyonecommentary.html> (arguing that speed advantage enjoyed by high-frequency traders should not be confused with front-running, and “HFTs cannot front-run anyone”).

⁸¹ John D. Arnold, *Spoofers Keep Markets Honest*, BLOOMBERG VIEW (Jan. 23, 2015, 9:00 AM EST), <https://www.bloomberg.com/view/articles/2015-01-23/high-frequency-trading-spoofers-and-front-running>.

⁸² *Id.*

⁸³ Nasdaq defines front-running as: “Entering into an equity trade, options or futures contracts with advance knowledge of a block transaction that will influence the price of the underlying security to capitalize on the trade. This practice is expressly forbidden by the SEC. Traders are not allowed to act on nonpublic information to trade

(FINRA).⁸⁴ Second, a 2016 study of nine months of quote and trade data on the 30 stocks that comprise the Dow Jones found that front-running is rare.⁸⁵ Insofar as front-running is both prohibited and uncommon,⁸⁶ the tolerance of spoofing as an anchor on the practice appears dubious. Third, it is not clear that spoofing would render front-running unprofitable. Some order-anticipation strategies might detect spoofing, piggy-back onto it, and enhance the front-runner's gain at the expense of the spoofer.⁸⁷ Fourth, legalizing spoofing creates an obvious slippery slope. If spoofing is legalized, then other forms of manipulation or disruption might follow suit.⁸⁸

Overall, the argument in favor of aggressively prosecuting spoofing and layering is compelling.

D. Spoofing, Layering, and High-Frequency Trading

Spoofing and layering occur in manual⁸⁹ and even non-electronic trading.⁹⁰ However, most of the spoofing that has been prosecuted to date took place in the context of automated (algorithmic) trading,⁹¹ much of it occurred in connection with HFT, and it is anticipated that in future years most spoofing will be accomplished by traders using algorithms and HFT.⁹² There is

ahead of customers lacking that knowledge.” Nasdaq, *Front Running, Definition* <https://www.nasdaq.com/investing/glossary/f/front-running> (last visited Mar. 15, 2019).

⁸⁴ See Financial Industry Regulatory Authority, *Getting Up to Speed on High-Frequency Trading* (Nov. 25, 2015), <http://www.finra.org/investors/getting-speed-high-frequency-trading>. Front-running is prohibited by FINRA Rule 5270. See WilmerHale, *SEC Approves New FINRA Rule 5270: A Significant Expansion of FINRA's Prohibitions on Front Running Block Transactions* (Sept. 14, 2012), <https://www.wilmerhale.com/en/insights/publications/sec-approves-new-finra-rule-5270-a-significant-expansion-of-finras-prohibitions-on-front-running-block-transactions>.

⁸⁵ See Robert P. Bartlett, III & Justin McCrary, *How Rigged are Stock Markets? Evidence from Microsecond Timestamps*, National Bur. of Econ. Res. Working Paper Series, Working Paper 22551 (Aug. 2016), <http://www.finra.org/investors/getting-speed-high-frequency-trading>.

⁸⁶ But cf. Sam Mamudi, *Charlie Munger: HFT is Legalized Front-Running*, BARRONS (May 3, 2013, 1:25 PM ET), <https://www.barrons.com/articles/BL-SWB-27750> (presenting argument that HFT is legalized front-running).

⁸⁷ See *Spoofing Corrupts Markets: A Reply to John Arnold*, MECHANICAL MARKETS (Apr. 12, 2015), <https://mechanicalmarkets.wordpress.com/2015/04/12/spoofing-corrupts-markets-a-reply-to-john-arnold/>.

⁸⁸ See *id.*

⁸⁹ See, e.g., CFTC, *CFTC Orders Floor Broker Anuj C. Singhal to Pay \$150,000 Penalty for Spoofing in Wheat Futures Market*, Release No. 7709-18 (Apr. 9, 2018), <https://www.cftc.gov/PressRoom/PressReleases/7709-18> (penalty imposed for spoofing via manual trading in CME wheat futures).

⁹⁰ See Jan Paul Miller, Steve Sherman & Amina Musa, *The Anti-Spoofing Provision of the Dodd-Frank Act: New White Collar Crime or 'Spoof' of a Law?* (last visited Mar. 15, 2019), https://www.thompsoncoburn.com/docs/default-source/News-Documents/spoofing.pdf?sfvrsn=e0984cea_0; Paul J. Pantano, et al., Willkie Farr & Gallagher LLP, Client Alert, *Spoofing Cases Provide Insight into Civil Penalties and Highlight Criminal Exposure* (Feb. 9, 2018), https://www.willkie.com/~media/Files/Publications/2018/02/Spoofing_Cases_Provide_Insight_into_Civil_Penalties.pdf (“[T]he CFTC’s focus on spoofing is not limited to algorithmic trading.”).

⁹¹ See Zach Brez, Allison Lullo & Giselle Sedano, *CFTC 2018 Enforcement: Where the Puck is Going*, N.Y. L.J. (Jan. 26, 2018), <https://www.law.com/newyorklawjournal/sites/newyorklawjournal/2018/01/26/cftc-2018-enforcement-where-the-puck-is-going/?slreturn=20180830222228> (“Although there have been cases brought against ‘manual’ spoofers, the majority of CFTC and [SEC] enforcement actions against spoofers involved automated spoofing.”). Some spoofing schemes involve a combination of manual and automated placement of bids and offers. See, e.g., In the Matter of Kevin Crepeau, CFTC Docket No. 19-05 (Jan. 31, 2019).

⁹² Gregory Scopino, *Preventing Spoofing: From Criminal Prosecution to Social Norms*, 84 U. CIN. L. REV. 1069, 1088 (2016); David Yeres, Robert Houch & Benjamin Berringer, *Spoofing: The First Criminal Conviction Comes in the U.S.—Perspectives from the U.S. and U.K.*, 36 FUT. & DERIV. L. REP. (Jan. 2016).

no doubt that HFT facilitates spoofing and layering schemes⁹³ and such schemes can multiply HFT's financial benefit to traders.⁹⁴ Spoofing and layering are more viable for HFTs because their speed permits them to mitigate the risk that other market participants will trade against their spoof orders by cancelling immediately in response to upward price moves.⁹⁵ Because HFT has pushed open the door to spoofing and layering, it is useful to consider spoofing enforcement in the broader context of HFT regulation.

HFT expanded dramatically in the last fifteen years, peaked in 2009,⁹⁶ and still accounts for at least half the trading volume for both U.S. equities and futures markets.⁹⁷ Purported primary advantages of HFT include reduced short-term market volatility,⁹⁸ narrower bid-ask spreads for large-cap stocks,⁹⁹ and increased market liquidity and efficiency.¹⁰⁰ Purported primary disadvantages include declines in market integrity, market fairness, and quality of liquidity.¹⁰¹ The disadvantages have spurred federal legislation to regulate HFT, but no such bill has been enacted.¹⁰² Similarly, the SEC,¹⁰³ CFTC,¹⁰⁴ and exchanges have mostly refrained from adopting HFT-specific regulatory measures.

⁹³ See, e.g., Jones Day, Commentary, *Spotlight on Spoofing: Looking Back at 2015 and Forward to 2016*, at 1 (Feb. 2016), <https://www.jonesday.com/Spotlight-on-Spoofing-Looking-Back-at-2015-and-Forward-to-2016-02-09-2016/> (linking increase in spoofing to rise of HFT and algorithmic trading).

⁹⁴ See Miller, Sherman & Musa, *supra* note 90 (“Spoofing seeks to increase the available profits associated with high frequency trading. . . .”); Jodi Misher Peiken & Brent M. Tunis, *When is a Bid or Offer a ‘Spoof’?*, 5 (No. 10) BUS. CRIMES BULL. (June 2018), <https://www.maglaw.com/publications/articles/2018-06-05-when-is-a-bid-or-offer-a-spoof/res/id=Attachments/index=0/Peikin%20Tunis.BCB.June%202018.pdf> (stating that federal government’s concern about spoofing arises from HFT’s dramatic increase in last decade).

⁹⁵ Credit Suisse, *High Frequency Trading—Measurement, Detection and Response* 4 (Dec. 6, 2012).

⁹⁶ See, e.g., Orcun Kaya, *High Frequency Trading: Reaching the Limits*, AUTOMATED TRADER (2016), <http://www.automatedtrader.net/articles/high-frequency-trading/156775/high-frequency-trading-reaching-the-limits> (“[T]he HFT share as a fraction of total equity trading has been declining since the financial crisis. . . .”). Aggregate revenues for HFT firms from trading U.S. stocks declined from \$7.2 billion in 2009 to less than \$1 billion in 2017. Gregory Meyer, Nicole Bullock & Joe Rennison, *How High-Frequency Trading Hit a Speed Bump*, FINANCIAL TIMES (Jan. 1, 2018), <https://www.ft.com/content/d81f96ea-d43c-11e7-a303-9060cb1e5f44>.

⁹⁷ See, e.g., Yesha Yadav, *The Failure of Liability in Modern Markets*, 102 VA. L. REV. 1031, 1035 (2016) (stating that HFT is responsible for 50-70% of equity volume and 60% of all futures trading in the United States); Nicole Bullock, *High-Frequency Traders Adjust to Overcapacity and Leaner Times*, FINANCIAL TIMES (Oct. 9, 2017) (noting that HFTs “have become the establishment”).

⁹⁸ Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rauterberg, *The New Stock Market: Sense and Nonsense*, 65 DUKE L.J. 191, 245-46 (2015) (“[T]he majority of academic evidence on the subject suggests that HFTs reduce volatility.”).

⁹⁹ See, e.g., Credit Suisse, *High Frequency Trading—The Good, the Bad, and the Regulation* 2 (Dec. 5, 2012) (“Various academic studies suggest HFT does indeed lead to lower volatility . . . , narrower spreads and increased depth . . . , and to enhanced price efficiency.”).

¹⁰⁰ See, e.g., Balp & Strampelli, *supra* note 74, at 352 (identifying HFT advantages).

¹⁰¹ See, e.g., Morelli, *supra* note 26, at 82-83 (identifying HFT disadvantages and noting that “HFT’s purported liquidity advantages are often selective, fleeting, and even illusory”).

¹⁰² See Joseph D. Heinz, Comment, *Spoofing: Ineffective Regulation Increases Market Inefficiency*, 67 DEPAUL L. REV. 77, 84 (2017) (noting failure of proposed bills to regulate HFT); Lindsey C. Crump, *Regulating to Achieve Stability in the Domain of High-Frequency Trading*, 22 MICH. TELECOMM. & TECH. L. REV. 161, 171 (2015) (same).

¹⁰³ Balp & Strampelli, *supra* note 74, at 355.

¹⁰⁴ See Tam Zanki, *Outgoing CFTC Member Wants High-Speed Trading Rules Set*, LAW 360 (Sept. 26, 2017, 9:34 PM EDT), <https://www.law360.com/articles/968015/outgoing-cftc-member-wants-high-speed-trading-rules-set> (discussing CFTC’s failure to adopt Regulation Automated Trading)

Proposed regulations include the following: (1) imposing speed bumps that would delay orders or information and thereby reduce the speed advantage that HFTs currently enjoy over other investors; (2) requiring proprietary HFT firms that meet certain criteria to register with the CFTC, SEC, or FINRA; (3) imposing a financial transaction tax on HFT firms; (4) making illegal the practice of co-location, whereby HFT firms and brokers pay exchanges for the privilege of placing their servers in the same physical location in order to reduce latency periods; and (5) imposing order cancellation fees.¹⁰⁵ These proposals have been mostly, but not entirely blocked in the United States. For example, some exchanges have created speed bumps.¹⁰⁶

HFT is not unique to the United States, and other jurisdictions have been considerably more aggressive about regulating such trading. The European Union's MiFid II Directive (effective in 2018)¹⁰⁷ and Market Abuse Regime (effective in 2016)¹⁰⁸ collectively constitute the world's first and most comprehensive set of rules to tackle HFT. The rules regulate access to markets by HFTs, regulate the monitoring of algorithms, redefine market manipulation in light of HFT, categorize spoofing and layering as forms of market manipulation, and exclude intent as an element of the civil offenses of spoofing and layering.¹⁰⁹ Arguments in favor of harmonizing the U.S. approach with that taken by the EU¹¹⁰ have merit.

E. How Do Spoofing and Layering Differ from Other Similar Forms of Trading?

Multiple forms of trading share some characteristics with spoofing and layering. As indicated, the key attribute of spoofing and layering is that bids are made with no intent to execute. This attribute also may appear to characterize some of the non-spoofing, non-layering trading and HFT that takes place—order cancellation is the norm and order execution is the exception. A 2013 study by the SEC found that less than five percent of orders placed on stock exchanges were filled,¹¹¹ and a separate study found that for exchange-traded products the ratio is more than 80 order cancellations for every trade.¹¹² While similar data for futures markets do not appear to be readily available, order cancellation is so common¹¹³ that futures exchanges

¹⁰⁵ Ana Avramovic, Credit Suisse, *Market Structure: We're All High Frequency Traders Now* 7 (Mar. 15, 2017); Lazaro I. Vazquez, *High Frequency Trading: Is Regulation the Answer?*, 17 WAKE FOREST J. BUS. & INTELL. PROP. L. 151, 167-70 (2017).

¹⁰⁶ *Id.*

¹⁰⁷ Directive 2014/65/EU, <https://eur-lex.europa.eu/eli/dir/2014/65/oj>; Regulation (EU) No. 600/2014, <https://eur-lex.europa.eu/eli/reg/2014/600/oj>.

¹⁰⁸ Regulation (EU) No. 596/2014, <https://eur-lex.europa.eu/eli/reg/2014/596/oj>.

¹⁰⁹ See Tilen Cuk & Arnaud Van Waeyenberge, *European Legal Framework for Algorithmic and High Frequency Trading (Mifid 2 and MAR): A Global Approach to Managing the Risks of the Modern Trading Paradigm*, 9 EUR. J. RISK REG. 146 (2018).

¹¹⁰ See, e.g., Megan Woodward, Note, *The Need for Speed: Regulatory Approaches to High Frequency Trading in the United States and the European Union*, 50 VAND. J. TRANSNAT'L L. 1359, 1393 (2017) (presenting argument in favor of harmonization).

¹¹¹ See U.S. Securities and Exchange Comm'n, *Trade to Order Volume Ratios* (Oct. 9, 2013), <https://www.sec.gov/marketstructure/research/highlight-2013-01.html#XAs71mhKhPY> (“[T]rade-to-order volume ratio for stocks is typically between 2.5% and 4.2%. . .”).

¹¹² See John Montgomery, Navigant Consulting, Inc., *Spoofing, Market Manipulation, and the Limit-Order Book*, 3 n.11 (May 3, 2016), https://www.navigant.com/~media/WWW/Site/Insights/Economics/2016/ECON_SpoofingMarketManipulation_TL_0516.pdf.

¹¹³ According to one estimate, more than half of bids or offers placed in futures markets are canceled. See Roy Strom, *An Unlikely Pair of Lawyers Team Up to Fight 'Spoofing' Cases*, NAT'L L.J. (Oct. 24, 2017).

provide numerous order types that presuppose cancellation.¹¹⁴ It is important to distinguish the primary non-spoof strategies from spoofing and layering.¹¹⁵

One strategy that shares some characteristics with spoofing is “banging the close” or “marking the close.” Courts have not precisely defined these terms,¹¹⁶ but the strategy generally consists of trading or placing bids/offers of a significant volume of futures contracts during or shortly before the closing or settlement period of the contracts in an effort to influence price in the trader’s favor¹¹⁷—usually to benefit a commodity or commodity futures position held elsewhere by the trader.¹¹⁸ Such conduct is a regulatory target because end of day trading often has an outsized impact on asset pricing.¹¹⁹ The CFTC and SEC treat marking the close as manipulative and deceptive and therefore illegal under CEA § 4c(a),¹²⁰ Securities Exchange Act (Exchange Act) § 10(b),¹²¹ and companion Rule 10b-5.¹²² The offense has two elements: (1) conduct evidencing a scheme to mark the close—i.e., trading at or near the close of the market so as to influence the price of a security; and (2) scienter, which is defined as a mental state embracing intent to deceive, manipulate, or defraud.¹²³

A second form is wash trading. A wash trade is one in which a market participant takes both sides of prearranged, noncompetitive trades with the intent that they offset each other.¹²⁴ This conduct is illegal under CEA § 4c(a),¹²⁵ Exchange Act § 10(b), and Rule 10b-5.¹²⁶ The elements of the offense are: (1) purchase and sale of any commodity for future delivery, (2) of the same delivery month of the same futures contract, (3) at the same or similar price, and (4) with the intent of not making a bona fide trading transaction.¹²⁷

¹¹⁴ See CME Group, CME Globex Reference Guide 13, 25, https://www.cmegroup.com/globex/files/GlobexRefGd.pdf?utm_source=cmegroup&utm_medium=friendly&utm_campaign=globexreferenceguide&redirect=/globexreferenceguide (last visited Mar. 15, 2019) (describing order types).

¹¹⁵ See Peiken & Tunis, *supra* note 94 (stating that biggest challenge of anti-spoofing enforcement “is distinguishing between HFT strategies that constitute illegal spoofing and HFT strategies that constitute legitimate trading activity”).

¹¹⁶ CFTC v. Wilson, No. 13 Civ. 7884 (RJS), 2018 WL 6322024, at *17 (S.D.N.Y. Nov. 30, 2018).

¹¹⁷ McCracken & Schleppegrell, *supra* note 34.

¹¹⁸ CFTC v. Wilson, No. 13 Civ. 7884 (RJS), 2018 WL 6322024, at *17 (S.D.N.Y. Nov. 30, 2018); Clifford Chance, *Overview of United States and United Kingdom Derivative and Commodity Market Enforcement Regimes* 67 (Dec. 2016), <https://www.aima.org/uploads/assets/uploaded/17f40585-6fee-4896-9e80e1f45fc69514.pdf>.

¹¹⁹ See Gina-Gail S. Fletcher, *Legitimate Yet Manipulative: The Conundrum of Open-Market Manipulation*, 68 DUKE L.J. 479, 507 (2018).

¹²⁰ 7 U.S.C. § 6c(a) (2018).

¹²¹ 15 U.S.C. § 78j (2018).

¹²² 17 C.F.R. § 240.10b-5 (2018). See, e.g., Mayer Brown, Mayer Brown Legal Update, *US SEC Brings First Enforcement Action for Market Manipulation through High-Frequency Trading* (Oct. 23, 2014), <https://www.mayerbrown.com/us-sec-brings-first-enforcement-action-for-market-manipulation-through-high-frequency-trading-10-23-2014/> (describing SEC enforcement action under § 10(b) and Rule 10b-5 for marking the close).

¹²³ Koch v. SEC, 793 F.3d 147, 152 (D.C. Cir. 2015).

¹²⁴ McCracken & Schleppegrell, *supra* note 34.

¹²⁵ See 7 U.S.C. § 6c (2018).

¹²⁶ See, e.g., Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 476 (1977) (discussing the Exchange Act’s prohibition of manipulative practices “such as wash sales, matched orders, or rigged prices, that are intended to mislead investors by artificially affecting market activity”).

¹²⁷ CFTC v. Moncada, 31 F. Supp. 3d 614, 617 (S.D.N.Y. 2014).

A third category encompasses fill or kill, stop-loss, and partial fill orders. Fill or kill orders are programmed to cancel if not filled immediately¹²⁸ and are designed to ensure that a position is entered into at a desired price and quantity, or not at all. Such orders are uncommon¹²⁹ and have their greatest utility when large volumes are involved, because absent the fill or kill programming the price could change significantly during the time required to fill. Stop-loss orders are entered with the intent to execute if the price falls or rises to a certain level,¹³⁰ while partial fill orders are entered with the intent to execute any portion or the entire quantity of the order, with the remainder being cancelled.¹³¹ All three order types were regarded as lawful prior to the 2010 enactment of the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA)¹³² and they remain so following the amendment of the CEA by the DFA.¹³³

A fourth category is iceberg orders, which comprise an order type expressly designed to display to the market only a portion of the total order size¹³⁴ and thus are similar to spoof orders.¹³⁵ Notwithstanding this similarity, the placement of iceberg orders is a legitimate trading strategy expressly allowed by the CME¹³⁶ and accepted by both the CFTC and DOJ. But iceberg orders, which became increasingly common as electronic trading replaced trading pits, can be combined with other orders¹³⁷ and the combination may be improper. If a trader submits numerous small orders as icebergs, but then submits and cancels a number of large orders that are entirely visible to the market, the CFTC may infer that the large canceled orders were intended to spoof. The CFTC made such inferences in its 2014 settlement of a spoofing case involving wheat futures¹³⁸ and in its 2017 settlement of a spoofing case involving crude oil, gold, silver, and copper futures.¹³⁹ In another more recent case, two precious metals traders were indicted by the DOJ in July 2018, in connection with a scheme that involved both spoofing and

¹²⁸ *Coscia*, 866 F.3d at 800.

¹²⁹ See Catriona Coppler, Comment, *The Anti-Spoofing Statute: Vague as Applied to the 'Hypothetically Legitimate Trader,'* 5 AM. U. BUS. L. REV. 261, 282 (2016) (“On an average day, 1.56 percent of all orders entered in the market are FOK orders.”).

¹³⁰ CFTC v. Oystacher, 203 F. Supp. 3d 934, 946 (N.D. Ill. 2016).

¹³¹ *Id.* at 947.

¹³² Pub. L. No. 111-203, 124 Stat. 1376 (July 21, 2010).

¹³³ See CFTC v. Oystacher, 203 F. Supp. 3d 934, 946 (N.D. Ill. 2016) (observing that fill-or-kill, stop-loss, and partial fill orders do not inherently require entering them with the intent to cancel prior to execution).

¹³⁴ See Ilan Guedj & An Wang, *An Update on Spoofing and its Challenges*, LAW360 (Mar. 16, 2016, 12:14 PM EDT), <https://www.law360.com/articles/1022562/an-update-on-spoofing-and-its-challenges> (“[A]n iceberg order allows the trader to display only a preset and often very small quantity of the total amount, potentially disguising a large order in the order book.”).

¹³⁵ See Jon Hill, *Ex-Trader's Acquittal Shines Spotlight on Evidence of Intent*, LAW360 (Apr. 7, 2018, 4:54 PM EDT), <https://www.law360.com/articles/1037563/ex-trader-s-acquittal-shines-spotlight-on-evidence-of-intent> (noting parallel characteristics of iceberg and spoofing orders).

¹³⁶ See CFTC v. Oystacher, No. 16-cv-9196, 2016 WL 3693429, at *27 (N.D. Ill. July 12, 2016) (discussing CME's authorization of iceberg orders). Iceberg orders can be detected by traders using small ping orders—typically of 100 shares or less—to test or ping the market. See Elvis Picardo, INVESTOPEDIA, *You'd Better Know Your High-Frequency Trading Terminology* (updated Feb. 13, 2018), <https://www.investopedia.com/articles/active-trading/042414/you-d-better-know-your-high-frequency-trading-terminology.asp>.

¹³⁷ Guedj & Wang, *supra* note 134.

¹³⁸ Consent Order, at 12-13, CFTC v. Moncada, Civ. Action No. 12-cv-8791 (CM) (GWG) (S.D.N.Y. Oct. 1, 2014) (describing use of iceberg orders).

¹³⁹ In re Simon Posen, CFTC Docket No. 17-20, 2017 WL 3216576, at *2 (C.F.T.C. July 26, 2017) (describing use of iceberg orders).

the placement of iceberg orders for gold, silver, platinum, and palladium futures on Commodity Exchange, Inc. (COMEX).¹⁴⁰

II. Spoofing Enforcement in the Futures Markets

Anti-spoofing enforcement currently takes place pursuant to a multitude of inconsistent statutes. As noted by one review, U.S. laws “prohibit spoofing a half dozen times, each time with different elements, and *only one time by name*.”¹⁴¹ The statutory anti-spoofing regime is examined below.

A. Pre-Dodd-Frank Act

Prior to the enactment of the DFA in 2010 the CFTC’s authority to regulate manipulative behavior was sharply constrained. The CEA prohibits fraud in § 4b—which governs contracts designed to defraud or mislead—but this provision has been held to apply only in connection with an order to make a futures contract for a customer,¹⁴² and thus its utility has been marginal in spoofing cases.

Section 6(c) of the CEA provides the CFTC with authority to pursue an administrative enforcement action against traders who manipulated or attempted to manipulate the market price of a commodity or future, and § 9(a)(2) makes it unlawful to manipulate or attempt to manipulate the price of a commodity or future.¹⁴³ The CEA nowhere defines the term “market manipulation.”¹⁴⁴ In this vacuum federal courts have held that a manipulation charge requires the Commission to prove four elements: (1) defendant had the ability to influence market prices, (2) defendant specifically intended to influence market prices, (3) an artificial price existed, and (4) defendant caused the artificial price.¹⁴⁵ An artificial price is one that fails to reflect legitimate forces of supply and demand.¹⁴⁶

The foregoing elements were virtually impossible for the CFTC to establish. Pre-DFA, all of the CFTC’s civil enforcement actions involving spoofing settled,¹⁴⁷ and only three people had been publicly charged in the United States with criminal spoofing.¹⁴⁸ More broadly, during the first 35 years of its existence (1974-2009) the CFTC settled numerous cases but it successfully

¹⁴⁰ See Indictment, U.S. v. Bases, No. 18 CR 48 (N.D. Ill. July 17, 2018). See also CFTC v. Oystacher, Case No. 15-cv-09196, 2016 WL 8256391, at *4-5 (N.D. Ill. Dec. 210, 2016) (describing defendants’ combined use of iceberg and spoof orders).

¹⁴¹ Sanders, *supra* note 36, at 524 (citation omitted).

¹⁴² David L. Kornblau, Allison Lurton & Jonathan M. Sperling, *Market Manipulation and Algorithmic Trading: The Next Wave of Regulatory Enforcement?*, 43 SEC. REG. & LAW REP. 369 (Feb. 20, 2012), https://www.cov.com/-/media/files/corporate/publications/2012/02/market_manipulation_and_algorithmic_trading.pdf.

¹⁴³ George S. Canellos, et al., Milbank, Tweed, Hadley & McCloy LLP, *The Law Surrounding Spoofing in the Derivatives and Securities Markets* 2 (June 2016), <https://www.milbank.com/images/content/2/4/v5/24678/Spoofing-in-the-Derivatives-and-Securities-Markets-June-2016.pdf> [hereinafter *The Law Surrounding Spoofing*].

¹⁴⁴ CFTC v. Wilson, No. 13 Civ. 7884 (RJS), 2018 WL 6322024, at *12 (S.D.N.Y. Nov. 30, 2018).

¹⁴⁵ See, e.g., *In re Amaranth Natural Gas Comm. Litig.*, 730 F.3d 170, 173 (2d Cir. 2013).

¹⁴⁶ CFTC v. Wilson, No. 13 Civ. 7884 (RJS), 2018 WL 6322024, at *13 (S.D.N.Y. Nov. 30, 2018).

¹⁴⁷ Scopino, *supra* note 92, at 1092.

¹⁴⁸ Skadden, Arps, Slate, Meagher & Flom LLP, Derivatives Alert, *CFTC and DOJ File a Flurry of Spoofing Actions* (Feb. 6, 2018).

litigated to final judgment only one contested case of manipulation in the futures markets.¹⁴⁹ As noted by former CFTC Commissioner Bart Chilton before the enactment of the DFA, “[p]roving manipulation is so onerous as to be almost impossible.”¹⁵⁰

B. Post-Dodd-Frank Act

Anti-spoofing civil and criminal enforcement has changed dramatically since the DFA amended the CEA. The next section of this Article discusses those developments. The discussion begins with an analysis of the statutory amendments.

1. The CFTC Obtains New Authority

First, the DFA added § 6(c)(1) to the CEA,¹⁵¹ as a stand-alone manipulation provision. This addition is very similar to Exchange Act § 10(b) insofar as it prohibits the use of any “manipulative or deceptive device or contrivance” in connection with a swap or contract for sale of any product or instrument covered by the CEA.¹⁵² The legislative history of § 6(c)(1) suggests that Congress intended to provide the CFTC with the same authority to pursue manipulation that the SEC already had under Exchange Act § 10(b).¹⁵³

Second, § 747 of the DFA added § 4c(a)(5)(C) to the CEA to prohibit three types of transactions designated “disruptive trading.” One of those transactions is spoofing in commodity markets, which for the first time was expressly prohibited by a federal statute. The amended CEA states in pertinent part: “It shall be unlawful for any person to engage in any trading practice, or conduct . . . [that] is, is of the character of, or is commonly known to the trade as, ‘spoofing’ (bidding or offering with the intent to cancel the bid or offer before execution).”¹⁵⁴ The single quotation marks are part of the DFA’s statutory text and reflect the potentially ambiguous nature of the offense.¹⁵⁵

¹⁴⁹ U.S. Commodity Futures Trading Comm’n, *De Principatibus*, Speech of Commissioner Bart Chilton before the Argus Media Summit (Oct. 21, 2009), <https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/speechandtestimony/opachilton-28.pdf> [hereinafter *De Principatibus*]. The case is Anthony J. DiPlacido, CFTC Docket No. 01-23, 2008 WL 4831204 (Nov. 5, 2008), *aff’d sub nom.* Di Placido v. CFTC, 364 Fed. App’x 657 (2d Cir. 2009) (summary order).

¹⁵⁰ *De Principatibus*, *supra* note 149. See also Jerry W. Markham, *Manipulation of Commodity Futures Prices—The Unprosecutable Crime*, 8 YALE J. ON REG. 281, 356 (1991) (stating that “manipulation is virtually an unprosecutable crime”).

¹⁵¹ See 7 U.S.C. § 9(1) (2018).

¹⁵² *Id.*

¹⁵³ See David Yeres, Robert Houck & Brendan Stuart, *U.S. Market Manipulation: Has Congress Given the CFTC Greater Latitude than the SEC to Prosecute Open Market Trading as Unlawful Manipulation? It’s Doubtful*, 38 FUT. & DERIV. L. REP. 1 (June 2018), https://www.cliffordchance.com/content/dam/cliffordchance/Thought_Leadership/US%20Market%20Manipulation_has%20congress%20given%20the%20CFTC%20greater%20latitude%20than%20the%20SEC%20to%20prosecute%20open%20market%20trading.pdf [hereinafter *U.S. Market Manipulation*].

¹⁵⁴ 7 U.S.C. § 6c(a)(5)(C) (2018).

¹⁵⁵ Gregory Mocek & Jonathan H. Flynn, *United States: ‘Spoofing’ — A New, Amorphous Crime with Domestic & International Implications for Traders* (Feb. 17, 2016), <http://www.mondaq.com/unitedstates/x/466718/Commodities+Derivatives+Stock+Exchanges/Spoofing+A+New+A+morphous+Crime+with+Domestic+International+Implications+for+Traders>.

The CFTC can choose to pursue a violation of § 4c(a)(5)(C) in administrative proceedings or in federal district court, as it can with respect to other provisions of the CEA.¹⁵⁶ A person who is found liable for spoofing in an administrative proceeding can be barred from trading on an exchange, have her CFTC registration suspended or revoked, and be compelled to pay restitution and a penalty (not to exceed the greater of \$140,000 or triple the monetary gain to the person for each violation).¹⁵⁷ A person who is found liable for spoofing in federal district court can be enjoined and compelled to pay disgorgement, restitution, and a penalty subject to the same dollar limit applicable in administrative proceedings.¹⁵⁸

Section 4c(a)(5)(C) has no legislative or drafting history. There was no relevant committee report, there was no relevant testimony by any witness, and there was no discussion during floor debates about the DFA.¹⁵⁹ The sole reference to this new section is this statement from one senator: “The CFTC requested, and received, enforcement authority with respect to insider trading, restitution authority, and disruptive trading practices.”¹⁶⁰

The CFTC adopted new Rule 180.1, effective on July 14, 2011, to implement the DFA’s amendment of the CEA to add § 6(c)(1). Rule 180.1 is modeled on and nearly identical to SEC Rule 10b-5,¹⁶¹ so that when interpreting the former courts are guided—but not controlled—by the substantial body of judicial precedent interpreting the latter.¹⁶²

The new rule expanded the CFTC’s historical authority over manipulative activity in at least three significant respects. First, Rule 180.1 is not limited to transactions, but instead extends to all activities that have a relationship to the futures contract or swap at issue. It reaches all manipulative or deceptive conduct in connection with the “purchase, sale, solicitation, execution, pendency, or termination” of any swap or contract of sale of any commodity in interstate commerce or for future delivery.¹⁶³ Second, the rule also imposes liability for attempts to use manipulative devices or schemes to defraud,¹⁶⁴ and in this respect grants to the CFTC more

¹⁵⁶ See Gideon Mark, *SEC and CFTC Administrative Proceedings*, 19 U. PA. J. CONST. L. 45 (2016) (describing the CFTC’s use of administrative proceedings).

¹⁵⁷ See 7 U.S.C. §§ 9(4), 9(10), 13b (2018).

¹⁵⁸ See 7 U.S.C. § 13a-1 (2018).

¹⁵⁹ See *Coscia*, 866 F.3d at 787 n.7.

¹⁶⁰ See *id.* (citing 156 Cong. Rec. S5922 (2010)).

¹⁶¹ See Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41,398, 41,399 (July 14, 2011) (“Given the similarities between CEA section 6(c)(1) and Exchange Act section 10(b), the [CFTC] deems it appropriate and in the public interest to model final Rule 180.1 on SEC Rule 10b-5.”). The CFTC added: “[B]y modeling final Rule 180.1 on SEC Rule 10b-5, the [CFTC] takes an important step toward harmonization of regulation of the commodities, commodities futures, swaps, and securities markets.” *Id.* at 41,399 n.11.

¹⁶² See *CFTC v. Kraft Foods Grp., Inc.*, 153 F. Supp. 3d 996, 1009 (N.D. Ill. 2015); Fletcher, *supra* note 119, at 498-99 (“By modeling Rule 180.1 on Rule 10b-5, the CFTC signaled its incorporation of decades of Rule 10b-5 jurisprudence and interpretation.”). *But cf.* U.S. Market Manipulation, *supra* note 153, at 4 (arguing that judicial interpretation of Rule 10b-5 should be controlling, rather than merely guiding, in cases involving application of Rule 180.1).

¹⁶³ U.S. Commodity Futures Trading Comm’n, Office of Public Affairs, Anti-Manipulation and Anti-Fraud Final Rules, https://www.cftc.gov/sites/default/files/ido/groups/public/@newsroom/documents/file/amaf_factsheet_final.pdf (last visited Mar. 15, 2019).

¹⁶⁴ David Meister, Jocelyn Strauber & Brittany Bettman, *Rule 180.1: The CFTC Targets Fraud and Manipulation*, N.Y. L.J. (Apr. 7, 2014).

expansive authority to assert a manipulation claim than is granted to the SEC under Exchange Act § 10(b) and Rule 10b-5.¹⁶⁵ This is significant, because attempted manipulation does not require proof of an artificial price¹⁶⁶ and the penalties for attempt can be as steep as they are for traditional manipulation.¹⁶⁷ Third, Rule 180.1 reduces the scienter requirement from specific intent to recklessness.¹⁶⁸ This aspect is probably the most important.¹⁶⁹ It both lowers the threshold and shifts the focus from a subjective determination of intent to an objective assessment of recklessness. This reduction has been controversial, for reasons that are explained in a subsequent section of this Article,¹⁷⁰ and it has not been universally accepted. Some observers contend that specific intent *is* required to establish a violation under the manipulation prong of CEA § 6(c)(1) and Rule 180.1.¹⁷¹

The scope of § 6(c)(1) and Rule 180.1 is hazy, even apart from the debate about intent. The CFTC seeks to use the statute and rule in pure fraud cases, pure manipulation cases, and cases that combine both fraud and manipulation.¹⁷² A quartet of cases decided in 2018 reached conflicting results and reflected an existing split with regard to the CFTC's approach. The Eleventh Circuit found fraud liability in the absence of market manipulation under § 6(c)(1) and Rule 180.1, in a case involving investments in metals derivatives.¹⁷³ Similarly, a New York federal district court held in a case involving the trading of virtual currency that Section 6(c)(1) and Rule 180.1 prohibit fraud or manipulation alone, and do not require proof of both.¹⁷⁴ And a Massachusetts federal district court held that the CFTC's anti-fraud enforcement authority under § 6(c)(1) and Rule 180.1 extends to transactions in virtual currency even absent allegations of manipulation.¹⁷⁵ But in a case currently on appeal to the Ninth Circuit, a California federal district court held that the CEA limits the application of § 6(c)(1) and Rule 180.1 to instances of

¹⁶⁵ David L. Kornblau, Allison Lurton & Jonathan M. Sperling, *Market Manipulation and Algorithmic Trading: The Next Wave of Regulatory Enforcement?*, 43 SEC. REG. & LAW REP. 369 (Feb. 20, 2012), https://www.cov.com/-/media/files/corporate/publications/2012/02/market_manipulation_and_algorithmic_trading.pdf.

¹⁶⁶ CFTC v. Wilson, No. 13 Civ. 7884 (RJS), 2018 WL 6322024, at *15 (S.D.N.Y. Nov. 30, 2018).

¹⁶⁷ Deborah A. Monson, et al, *Year in Review: Recent Developments in CFTC Enforcement*, 50 SEC. REG. & L. REP. 147 (Jan. 22, 2018).

¹⁶⁸ See Gregory Scopino, *The (Questionable) Legality of High-Speed 'Pinging' and 'Front-Running' in the Futures Markets*, 47 CONN. L. REV. 607, 665 (2015) ("Rule 180.1 prohibits fraud-based manipulation claims under a lower scienter standard of recklessness, as opposed to CEA Sections 6(c), 6(d), and 9(a)(2), which require proof of specific intent.")

¹⁶⁹ *Id.* at 674 (stating that primary benefit of Rule 180.1 to the CFTC is that the rule only requires proof of recklessness).

¹⁷⁰ See Section III(B), *infra*.

¹⁷¹ See David Yeres, Robert Houck & Brendan Stuart, *A Bridge Too Far: CFTC's 'Reckless' Manipulation Theory*, Law360 (Jan. 4, 2019, 5:20 PM EST), <https://www.law360.com/articles/1113505/a-bridge-too-far-cftc-s-reckless-manipulation-theory>.

¹⁷² Mark D. Young, et al., Skadden, Arps, Slate, Meagher & Flom LLP, *Recent Court Decisions Shine Spotlight on Scope of CFTC's Dodd-Frank Anti-Fraud and Anti-Manipulation Enforcement Authority* (Oct. 1, 2018), <https://www.skadden.com/insights/publications/2018/10/recent-court-decisions-shine-spotlight>.

¹⁷³ CFTC v. Southern Trust Metals, Inc., 894 F.3d 1313, 1325-27 (11th Cir. 2018).

¹⁷⁴ CFTC v. McDonnell, 287 F. Supp. 3d 213, 216 (E.D.N.Y. 2018). See also Ploss v. Kraft Foods Group, Inc., 197 F. Supp. 3d 1037, 1055 (N.D. Ill. 2016) (holding that an explicit misrepresentation is not required to state a § 6(c)(1) claim).

¹⁷⁵ CFTC v. My Big Coin Pay, Inc., No. 1:18-cv-10077-RWZ, 2018 WL 4621727 (D. Mass. Sept. 26, 2018).

manipulation that involve fraud.¹⁷⁶ If the Ninth Circuit adopts this minority view,¹⁷⁷ the authority of the CFTC to pursue spoofing cases under § 6(c)(1) and Rule 180.1 will be constrained.

2. The CFTC Issues Interpretive Guidance

Although § 4c(a)(5)(C) is self-executing,¹⁷⁸ the CFTC issued final Interpretive Guidance in May 2013 to clarify what conduct constitutes spoofing.¹⁷⁹ The Guidance is not a binding limitation on the CFTC's jurisdiction or enforcement authority.¹⁸⁰ It was issued following the termination of a rulemaking effort, commenced in November 2010, which cratered in large part because the CFTC was unable to clearly define spoofing.¹⁸¹ The Guidance declared that spoofing behavior includes, but is not limited to, the following four examples: “(i) [s]ubmitting or cancelling bids or offers to overload the quotation system of a registered entity, (ii) submitting or cancelling bids or offers to delay another person's execution of trades, (iii) submitting or cancelling multiple bids or offers to create an appearance of false market depth, and (iv) submitting or cancelling bids or offers with intent to create artificial price movements upwards or downwards.”¹⁸²

A § 4c(a)(5)(C) violation does not require manipulative intent, but a market participant still must act “with some degree of intent . . . beyond recklessness” to engage in the spoofing trading practices prohibited by the statute.¹⁸³ Specifically, spoofing requires intent to cancel the order at the time it was placed,¹⁸⁴ which invariably will be easier to prove than an intent to cause artificial prices.

The CFTC underscored in the Interpretive Guidance that while it plans to evaluate all of the facts and circumstances of each particular case—including a person's trading practices and patterns—it does not seek to make a pattern of trading activity a requirement of the offense. A single instance of trading activity could constitute a violation of § 4c(a)(5)(C), provided it was conducted with the prohibited intent.¹⁸⁵ The Guidance does not, however, set forth parameters defining when trading practices cross the line from legitimate conduct to proscribed spoofing.

¹⁷⁶ CFTC v. Monex Credit Corp., 311 F. Supp. 3d 1173, 1189 (C.D. Cal. 2018).

¹⁷⁷ In the first judicial interpretation of Rule 180.1—CFTC v. Kraft Foods Grp., Inc., 153 F. Supp. 3d 996, 1009 (N.D. Ill. 2015)—the court similarly held that Rule 180.1 only prohibits fraud and fraud-based manipulation.

¹⁷⁸ See Antidisruptive Practices Authority, 78 Fed. Reg. 31,890, 31,890 n.4 (May 28, 2013) (“The Commission also notes that new CEA section 4c(a)(5) is self-effectuating.”).

¹⁷⁹ Antidisruptive Practices Authority, 78 Fed. Reg. 31,890–31,897 (May 28, 2013).

¹⁸⁰ Charge Against Spoofing, *supra* note 2.

¹⁸¹ See Peiken & Tunis, *supra* note 94 (discussing failed effort at rulemaking); U.S. Commodity Futures Trading Comm'n, *Staff Roundtable on Disruptive Trading Practices* 64, 171-72 (Dec. 2, 2010), https://www.cftc.gov/sites/default/files/idc/groups/public/@swaps/documents/dfsubmission/dfsubmission24_120210-transcri.pdf (noting difficulty of defining spoofing).

¹⁸² Antidisruptive Practices Authority, 78 Fed. Reg. 31,890, 31,896 (May 28, 2013).

¹⁸³ U.S. Commodity Futures Trading Comm'n, Office of Public Affairs, Interpretive Guidance and Policy Statement on Disruptive Practices, https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/dtp_factsheet.pdf (last visited Mar. 15, 2019).

¹⁸⁴ *Coscia*, 866 F.3d at 795.

¹⁸⁵ Antidisruptive Practices Authority, 78 Fed. Reg. 31,890, 31,896 (May 28, 2013).

Nor does it define the phrase “beyond recklessness.”¹⁸⁶ These omissions have caused some confusion among futures traders as to whether their strategies are illegal.¹⁸⁷ The CFTC does not appear troubled by this fog and instead has punted to the courts to ultimately decide what conduct constitutes spoofing or layering.¹⁸⁸

3. The CFTC Retains its Former Authority

Following the amendment of the CEA by the DFA, the CFTC also retained its traditional authority over manipulative conduct under new CEA § 6(c)(3),¹⁸⁹ new Rule 180.2¹⁹⁰ (adopted simultaneously with new Rule 180.1), and § 9(a)(2).¹⁹¹ Section 6(c)(3) makes it “unlawful for any person, directly or indirectly, to manipulate or attempt to manipulate the price of” a swap, commodity, or future,¹⁹² and Rule 180.2 mirrors that language. Civil liability under § 6(c)(3) tracks § 9(a)(2)’s criminal proscription. The CFTC has stated that it will apply Rule 180.2 using the traditional four-part test that had long bedeviled it in manipulation cases¹⁹³ and this test continues to apply under § 9(a)(2).¹⁹⁴ Whereas recklessness suffices and no artificial price must be shown to establish a violation under Rule 180.1, a Rule 180.2 violation requires a specific intent to create or affect a price or price trend that does not reflect legitimate forces of supply and demand.¹⁹⁵ The CFTC can choose to pursue a violation of § 6(c) or § 9(a)(2) either in an administrative proceeding or in federal district court, and the potential penalty (up to \$1 million for each violation)¹⁹⁶ is significantly greater than it is for a violation of § 4c(a)(5)(C).

4. The CFTC Exercises its Authority in Combination with the DOJ

The CFTC did not take immediate advantage of its new enforcement authority. It did not bring its first spoofing or layering enforcement action under the amended CEA until 2013, when it settled with Panther Energy Trading, LLC (Panther) and Coscia.¹⁹⁷ Respondents had used a

¹⁸⁶ Courts have often defined “recklessness” as conduct that departs so far from the standards of ordinary care that it is very difficult to believe the actor was not aware of what he or she was doing. *See, e.g.,* Drexel Burnham Lambert, Inc. v. CFTC, 850 F.2d 742, 748 (D.C. Cir. 1988).

¹⁸⁷ *See, e.g.,* Christian T. Kemnitz, Peter G. Wilson & Hannah O. Koesterer, United States v. Coscia: *First Spoofing Conviction Leaves Hard Questions for Another Day*, 49 SEC. REG. & LAW REP. 1412 (Sept. 4, 2017), https://www.kattenlaw.com/files/221664_spcoscia_sept4_srlr.pdf (“Despite regulators’ significant recent interest in ‘spoofing,’ there is little consensus as to how exactly that term should be understood.”).

¹⁸⁸ *See* Peiken & Tunis, *supra* note 94.

¹⁸⁹ 7 U.S.C. § 9(3) (2018).

¹⁹⁰ 17 C.F.R. § 180.2 (2018).

¹⁹¹ 7 U.S.C. § 13 (2018).

¹⁹² 7 U.S.C. § 9(3) (2018).

¹⁹³ *See* Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41,398, 41,407 (July 14, 2011).

¹⁹⁴ *See* Ploss v. Kraft Foods Group, Inc., 197 F. Supp. 3d 1037, 1060 (N.D. Ill. 2016) (“Because the new Dodd-Frank provisions were not intended to affect Section 9(a)(2), the four-part test that courts have adopted for Section 9(a)(2) still stands.”).

¹⁹⁵ U.S. Commodity Futures Trading Comm’n, Anti-Manipulation and Anti-Fraud Final Rules, https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/amaf_factsheet_final.pdf (last visited Mar. 15, 2019).

¹⁹⁶ *See, e.g.,* 7 U.S.C. § 13a-1(d)(1)(B) (2018).

¹⁹⁷ *See* In re Panther Energy Trading LLC, CFTC Docket No. 13-26 (C.F.T.C. July 13, 2013); Covington & Burling LLP, *Derivatives Enforcement Outlook: 2016*, at 1 (Feb. 4, 2016), https://www.cov.com/-/media/files/corporate/publications/2016/02/derivatives_enforcement_outlook_2016.pdf (identifying *Panther* as the first such enforcement action).

layering algorithm to quickly place and cancel a series of bids or offers designed to induce changes in price and demand in order to benefit orders they desired to execute.¹⁹⁸ In the CFTC’s civil action, respondents paid a \$1.4 million penalty, disgorged an additional \$1.4 million in trading profits, and agreed to serve a one-year suspension from trading on any CFTC-registered entity.¹⁹⁹ This suspension was criticized as wholly inadequate by former CFTC Commissioner Bart Chilton.²⁰⁰ In the years since the Panther/Coscia civil action settled the CFTC has become very active in policing spoofing and layering.²⁰¹

The CFTC has not acted alone. Current CFTC Director of Enforcement James McDonald has observed that “[a] robust combination of criminal and regulatory enforcement in our markets is critical to achieving optimal deterrence,”²⁰² and the CFTC and DOJ do have a history of cooperating to prosecute spoofing and other forms of manipulation.²⁰³ In fiscal year 2018, fourteen filed CFTC enforcement actions were followed within seven days by the filing of parallel, cooperative criminal actions.²⁰⁴ This was the highest number of parallel CFTC/DOJ actions filed in any fiscal year during the period 2010 to 2018.²⁰⁵ CFTC/DOJ cooperation resulted in Coscia’s indictment and conviction on six counts of spoofing and six counts of commodities fraud.²⁰⁶ Coscia became the first person to be convicted of spoofing following a trial, his conviction was affirmed by the Seventh Circuit in 2017,²⁰⁷ and the Supreme Court denied certiorari in 2018.²⁰⁸ More generally, spoofing was a high priority of the Securities and

¹⁹⁸ See *In re Panther Energy Trading LLC*, CFTC Docket No. 13-26 (C.F.T.C. July 13, 2013).

¹⁹⁹ *Id.* at 5-6.

²⁰⁰ See U.S. Commodity Futures Trading Comm’n, Concurring Statement of Commissioner Bart Chilton in the Matter of Panther Energy Trading LLC and Michael J. Coscia (July 22, 2013), <https://www.cftc.gov/PressRoom/SpeechesTestimony/chiltonstatement072213> (stating that spoofing conduct in the case “warrants the imposition of a much more significant trading ban to protect markets and consumers, and to act as a sufficient deterrent to other would-be wrongdoers”).

²⁰¹ Jason Grimes & Anne M. Termine, Covington & Burling LLP, “Flash Crash’ Derivatives Trader Settles Spoofing Case (Nov. 24, 2016), <https://www.covfinancialservices.com/2016/11/flash-crash-derivatives-trader-settles-spoofing-case/>. (“[S]ince bringing its first spoofing enforcement action in 2013, the CFTC has been very active in this area.”).

²⁰² *Speech of Enforcement Director James M. McDonald Regarding Enforcement Trends at the CFTC*, NYU School of Law: Program on Corporate Compliance & Enforcement (Nov. 14, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamcdonald1>.

²⁰³ See Behnam Remarks, *supra* note 55 (noting “aggressive and coordinated enforcement approach” between DOJ and CFTC in spoofing cases); Paul J. Pantano, Jr., et al., Willkie Farr & Gallagher LLP, Client Memorandum, *New CFTC Administration Continues Hard Line Against Spoofing* (Apr. 12, 2017), https://www.willkie.com/~media/Files/Publications/2017/04/New_CFTC_Administration_Continues_Hard_Line_Against_Spoofing.pdf (describing coordination between DOJ and CFTC).

²⁰⁴ U.S. Commodity Futures Trading Comm’n, *2018 Annual Report on the Division of Enforcement* 13 (Nov. 2018), https://www.cftc.gov/sites/default/files/2018-11/ENFAnnualReport111418_0.pdf.

²⁰⁵ *Id.* By January 2019 the DOJ had charged only individuals for spoofing-related crimes. No organizations had yet been prosecuted. Lanny Breuer & Laura Brookover, *Zhao’s Spoofing Plea Deal Telegraphs More to Come in 2019*, LAW360 (Jan. 22, 2019, 12:59 PM EST), <https://www.law360.com/articles/1120306/zhao-s-spoofing-plea-deal-telegraphs-more-to-come-in-2019>.

²⁰⁶ *United States v. Coscia*, 177 F. Supp. 3d 1087, 1090 (N.D. Ill. 2016), *aff’d*, 866 F.3d 782 (7th Cir. 2017).

²⁰⁷ *United States v. Coscia*, 866 F.3d 782 (7th Cir. 2017).

²⁰⁸ *United States v. Coscia*, 138 S. Ct. 1989 (2018).

Financial Fraud Unit of the DOJ's Fraud Section in 2018 and that focus is expected to continue.²⁰⁹

The DOJ's anti-spoofing arsenal is expansive but mostly untested. First, any knowing violation of CEA § 4c(a)(5)(C) or § 9(a)(2) can be prosecuted by the DOJ as a felony punishable by up to ten years in prison and a fine of not more than \$1 million per count.²¹⁰ The same four-part test applicable in civil cases commenced under § 9(a)(2) also applies in criminal cases.²¹¹ Second, the DOJ has prosecuted spoofing in commodity markets under 18 U.S.C. § 1343, which criminalizes wire fraud,²¹² and 18 U.S.C. § 371, which criminalizes conspiracy to commit wire fraud.²¹³ Third, the DOJ can use 18 U.S.C. § 1348, which criminalizes securities and commodities fraud²¹⁴ and is modeled on the federal mail and wire fraud statutes.²¹⁵ The DOJ often uses some combination of the foregoing provisions. In November 2018 defendant spoofers Kamaldeep Gandhi²¹⁶ and Krishna Mohan²¹⁷ both pleaded guilty to conspiring to commit wire fraud, commodities fraud, and spoofing. Earlier, Coscia was convicted under CEA § 4c(a)(5)(C), CEA § 9(a)(2), and 18 U.S.C. § 1348.

Prior to the enactment of the DFA the government did not prosecute any spoofing or layering under the wire or commodities fraud statutes. The situation has changed post-DFA. At least four advantages accrue to the DOJ by using the wire fraud statute in spoofing cases. First, the statute broadly covers conduct designed to mislead and is less closely tied to order cancellation than is the CEA.²¹⁸ Second, whereas the Financial Institutions Reform Recovery and Enforcement Act²¹⁹ extended the statute of limitations to ten years for a wire or mail fraud that affects a financial institution;²²⁰ it did not extend the limitations period for securities or commodities fraud (six years)²²¹ or spoofing violations under the CEA (five years).²²² Third, the wire fraud statute provides for harsher penalties than does CEA § 4c(a)(5)(C)—the former authorizes imprisonment of up to 30 years,²²³ triple what the latter provides. Fourth, the wire fraud statute, which criminalizes any scheme to defraud that affects interstate or foreign commerce, has a broader jurisdictional reach than does the CEA.²²⁴

²⁰⁹ Kevin Muhlendorf & Madeline Cohen, *Impressive Results from DOJ's Fraud Section in 2018*, LAW360 (Jan. 8, 2019, 5:53 PM EST), <https://www.law360.com/articles/1116578/impressive-results-from-doj-fraud-section-in-2018>.

²¹⁰ See 7 U.S.C. § 13(a)(2) (2018).

²¹¹ *United States v. Reliant Energy Servs.*, 420 F. Supp. 2d 1043, 1056 (N.D. Cal. 2006).

²¹² See 18 U.S.C. § 1343 (2018); Henning, *supra* note 69.

²¹³ See 18 U.S.C. § 371 (2018).

²¹⁴ 18 U.S.C. § 1348 (2018). See, e.g., Complaint, *United States v. Milrud*, No. 15-cr-00455 (D.N.J. Jan. 12, 2015) (alleging criminal spoofing of securities markets).

²¹⁵ *Coscia*, 866 F.3d at 799.

²¹⁶ See Plea Agreement, *United States v. Gandhi*, Crim. No. 4:18-cr-00609 (S.D. Tex. Nov. 2, 2018).

²¹⁷ See Plea Agreement, *United States v. Mohan*, Crim. No. 4:18-cr-00610 (S.D. Tex. Nov. 6, 2018).

²¹⁸ See Henning, *supra* note 69.

²¹⁹ Pub. L. 101-73, 103 Stat. 183 (1989).

²²⁰ See 18 U.S.C. § 3293(2) (2018).

²²¹ See, e.g., 18 U.S.C. § 3301 (2018) (providing six-year statute of limitations for securities fraud).

²²² 18 U.S.C. § 3282 (2018).

²²³ See 18 U.S.C. § 1343 (2018).

²²⁴ See Clifford Chance, *Overview of United States and United Kingdom Derivative and Commodity Market Enforcement Regimes* 6 (Dec. 2016), <https://www.aima.org/uploads/assets/uploaded/17f40585-6fee-4896-9e80e1f45fc69514.pdf> (noting that DOJ is often able to establish jurisdiction under the wire fraud statute “despite the fact that the conduct occurred largely, if not entirely, overseas”).

While the wire fraud statute has obvious advantages for the DOJ, it is not clear that the statute applies in a spoofing or layering case. The government has obtained wire fraud pleas from defendants in such cases post-DFA,²²⁵ but no court has held that spoofing constitutes wire fraud. There are plausible grounds to argue that it does not. To obtain a conviction of wire fraud or conspiracy to commit wire fraud the government must prove beyond a reasonable doubt, *inter alia*, that defendant engaged in a scheme to defraud that involved the making of a false statement or material misrepresentation.²²⁶ That hurdle may be difficult to clear in a spoofing case.

The government could argue that spoof orders are false and misleading representations of supply and demand because they are orders that defendant traders do not intend to execute. But because such orders generally are capable of being filled, and often are filled, defendants could respond that the orders are merely fleeting, rather than false. The government also could assert that by placing spoof orders, defendant traders make implied false representations to the market that they intend to execute the orders when they actually intend to cancel. Again, defendants have tenable responses. No court has ever held that implied misrepresentations can support a wire fraud conviction. Moreover, defendants could argue that, if anything, such conduct constitutes non-disclosure in a context where no fiduciary obligation is owed to other high-frequency traders and no disclosure is required.²²⁷ Spoofing traders previously employed by Merrill Lynch and Deutsche Bank advanced the foregoing arguments, or variants thereof, in bids to dismiss their indictments in federal district court in Illinois,²²⁸ and those motions to dismiss were pending in February 2019.

III. Spoofing and Layering in the Securities Markets

Spoofing and layering are not restricted to the futures markets. They also occur with some frequency in the securities markets.²²⁹ However, the federal securities statutes, unlike the CEA, do not expressly prohibit spoofing or layering, even after the enactment of the DFA in 2010.²³⁰ Instead, the SEC typically has tackled these trading practices by characterizing them as prohibited fraud or manipulation.²³¹ The SEC has been investigating and prosecuting alleged

²²⁵ See, e.g., Plea Agreement, *United States v. Gandhi*, Crim. No. 4:18-cr-00609 (S.D. Tex. Nov. 2, 2018); Plea Agreement, *United States v. Liew*, No. 17-CR-001 (N.D. Ill. June 1, 2017).

²²⁶ See, e.g., *United States v. Sheneman*, 682 F.3d 623, 628-29 (7th Cir. 2012).

²²⁷ See, e.g., *Reynolds v. East Dyer Dev. Co.*, 882 F.2d 1249, 1252 (7th Cir. 1989) (holding that mere failure to disclose does not constitute wire or mail fraud).

²²⁸ See Dean Seal, *Spoofing is Not Fraud, Ex-Merrill Lynch Traders Say*, LAW360 (Nov. 19, 2018, 8:16 PM EST), <https://www.law360.com/illinois/articles/1103427/spoofing-is-not-fraud-ex-merrill-lynch-traders-say>; Rachel Graf, *Ex-Deutsche Bank Traders Say Spoofing Isn't Wire Fraud*, LAW360 (Nov. 15, 2018, 7:51 PM EST), <https://www.law360.com/articles/1102432/ex-deutsche-bank-traders-say-spoofing-isn-t-wire-fraud>.

²²⁹ See, e.g., Bradley Hope, *Regulators Clamp Down as 'Spoof' Trading Persists*, WALL ST. J. (Feb. 23, 2015, updated 4:07 PM GMT) (noting that spoofing “has long been used to manipulate prices of everything from stocks to bonds to futures”); *But cf.* Stanislav Dolgoplov, *Securities Fraud Embedded in the Market Structure Crisis: High-Frequency Traders as Primary Violators*, 9 WM. & MARY BUS. L. REV. 551, 588-89 (2018) (suggesting that spoofing and layering are “confined to the futures and commodities space”).

²³⁰ See Robert J. Anello & Richard F. Albert, *‘Spoofing’—the New Frontier for Criminal Prosecution?*, N.Y. L.J. (Dec. 1, 2015) (“[T]he amendments to the CEA prohibit spoofing only in the futures and derivatives markets. No parallel provision exists under the securities statutes.”).

²³¹ See Robert Houck, David Yeres & John Friel, *Comparing SEC and CFTC Market Abuse Regimes*, LAW360 (Mar. 1, 2016, 10:56 AM EST), <https://www.law360.com/articles/765248/comparing-sec-and-cftc-market-abuse-regimes> (“[T]he Exchange Act does not specifically prohibit spoofing. In the breach, the SEC has principally targeted spoofing in the securities markets under its existing anti-fraud and anti-manipulation authority.”).

spoofing in the securities markets at least since the early 2000s,²³² albeit with little clarity as to which specific trading conduct it believes is actionable.²³³ The agency primarily utilizes Exchange Act § 9(a)(2),²³⁴ Exchange Act § 10(b),²³⁵ and Rule 10b-5²³⁶ in its spoofing and layering enforcement actions.²³⁷ Those provisions are discussed separately below.

A. Exchange Act Section 9(a)(2)

The SEC's spoofing and layering cases often invoke § 9(a)(2),²³⁸ which, prior to 2010, only applied to exchange-traded securities.²³⁹ The statute currently makes it unlawful "[t]o effect . . . a series of transactions . . . creating actual or apparent active trading in [a security], or raising or depressing the price [of a security], for the purpose of inducing the purchase or sale of such security by others."²⁴⁰ This provision appears in the Exchange Act's section on "Manipulation of Security Prices," and was likely designed to target such practices as wash sales, in which consummated trades are used to mislead other market participants.²⁴¹ The SEC utilizes § 9(a)(2) by taking the position that in spoofing and layering cases, where there may be no purchase or sale,²⁴² cancelled (unconsummated) orders constitute transactions that create actual or apparent active trading.²⁴³ This position is subject to doubt,²⁴⁴ but it has not been regularly tested in litigation.²⁴⁵ The SEC may feel unencumbered in its reliance on § 9(a)(2) because courts have done a remarkably poor job delineating the statute's contours. As noted in one recent critique of the case law on manipulation, "there has been a consistent failure to substantively analyze,

²³² See SEC v. Shpilsky, Lit. Release No. 17221, 2001 WL 1408740 (SEC Nov. 5, 2001) (SEC files enforcement actions against six individuals for spoofing); Clifford C. Histed, *A Look at the 1st Criminal 'Spoofing' Prosecution: Part 1*, LAW360 (Apr. 20, 2015, 12:01 PM ET), <https://www.law360.com/articles/645167/a-look-at-the-1st-criminal-spoofing-prosecution-part-1>.

²³³ See Paul Hinton & Shaun Ledgerwood, *Coscia Verdict Highlights Different Approaches to High-Frequency Trading*, Securities Litig., American Bar Ass'n Section of Litig. (Nov. 12, 2015), <https://www.americanbar.org/groups/litigation/committees/securities/practice/2015/coscia-verdict.html> ("The SEC's enforcement record provides little guidance on what high-frequency trading practices constitute abuse, manipulation, or spoofing.").

²³⁴ 15 U.S.C. § 78i (2018).

²³⁵ 15 U.S.C. § 78j (2018).

²³⁶ 17 C.F.R. 210.10b-5 (2018).

²³⁷ To a lesser extent the SEC also utilizes § 17(a) of the Securities Act, 15 U.S.C. § 77q(a) (2018). The Law Surrounding Spoofing, *supra* note 143, at 10; Clifford Chance, *Overview of United States and United Kingdom Derivative and Commodity Market Enforcement Regimes* 30 n.46 (Dec. 2016), <https://www.aima.org/uploads/assets/uploaded/17f40585-6fee-4896-9e80e1f45fc69514.pdf>. A recent example of the SEC's use of § 17(a) in a layering case is SEC v. Lek Sec. Corp., 276 F. Supp. 3d 49 (S.D.N.Y. 2017).

²³⁸ The Law Surrounding Spoofing, *supra* note 143, at 11.

²³⁹ Stock Market Manipulation, *supra* note 36, at 117.

²⁴⁰ 15 U.S.C. § 78i (2018).

²⁴¹ The Law Surrounding Spoofing, *supra* note 143, at 11.

²⁴² See Andrew Verstein, *Insider Tainting: Strategic Tipping of Material Nonpublic Information*, 112 NW. U. L. REV. 725, 771 n.200 (2018) ("Effective spoofing may therefore involve no purchase or sale.").

²⁴³ See, e.g., *In re Biremis Corp.*, File No. 3-15136, Exchange Act Release No. 68456 (SEC Dec. 18, 2012) (applying § 9(a)(2) in a case involving layering in securities markets).

²⁴⁴ See, e.g., Michael A. Asaro & Richard R. Williams, Jr., *'Spoofing': The SEC Calls it Manipulation, but Will Courts Agree?*, N.Y. L.J. (July 17, 2017) ("[I]t is worth noting that § 9(a)(2) governs 'transactions in any security.' Arguably, bids and offers are not 'transactions' until they are executed.").

²⁴⁵ Some authority supports the SEC's position. See *Spicer v. Chicago Board Options Exch., Inc.*, No. 88 C 2139, 1990 WL 172712, at *2 (N.D. Ill. Oct. 30, 1990), *aff'd*, 977 F.2d 255 (7th Cir. 1992) (stating that placement of bids qualifies as effecting a series of transactions).

precisely identify, or even define the improper purpose required by [§ 9(a)(2)] or discuss what evidence would satisfactorily prove it.”²⁴⁶

B. Exchange Act Section 10(b)

The SEC’s spoofing and layering cases also invoke the anti-manipulation and anti-fraud provisions of Exchange Act § 10(b), which prohibits manipulative or deceptive devices or contrivances in violation of such SEC rules as Rule 10b-5.²⁴⁷ Section 10(b) may be applicable in these cases, insofar as spoofing and layering can be characterized as artificially affecting the price of a security, sending a false pricing signal, or deceiving market participants about supply and demand.²⁴⁸ Nevertheless, the SEC’s reliance on § 10(b) may be even more thorny than its reliance on § 9(a)(2), in light of the federal circuit split, described below, concerning open market manipulation.

Manipulative conduct is often divided into two categories: (1) traditional closed market manipulation and (2) open market manipulation. The former category encompasses conduct, such as a wash sale, that is explicitly proscribed by the Exchange Act. In these closed market activities a single person or entity controls both sides of a transaction in order to create a false appearance of legitimate market activity.²⁴⁹ The latter category is much more controversial. The federal courts are plagued by a series of splits concerning open market manipulation, including disagreement as to whether such manipulation exists, whether it is potentially unlawful under § 10(b), and how it should be defined.²⁵⁰ Nevertheless, such manipulation is often understood to encompass activity on the open market that is facially legitimate—it involves no objectively fraudulent or deceitful acts—but when examined in context may constitute manipulative conduct.²⁵¹

All courts agree that one of the elements of a manipulation claim under Rule 10b-5 is the existence of a manipulative act. For those courts that do recognize open market manipulation as an offense, the critical issue is resolving what conduct constitutes such an act. The SEC’s broad view is that open market activities equate to market manipulation if the trader’s sole intent in placing an order is to move the price of stock. The D.C. Circuit agreed with the SEC in 2001²⁵² and again in 2015.²⁵³ A split developed when the Second²⁵⁴ and Third²⁵⁵ Circuits rejected the sole intent test and adopted a more restrictive “inaccurate information” test. Pursuant to the latter the alleged manipulator, in addition to acting with manipulative intent, must inject inaccurate

²⁴⁶ Stock Market Manipulation, *supra* note 36, at 115.

²⁴⁷ See 15 U.S.C. § 78j (2018).

²⁴⁸ The Law Surrounding Spoofing, *supra* note 143, at 11. See also SEC v. Lek Sec. Corp., 276 F. Supp. 3d 49, 60 (S.D.N.Y. 2017) (“The SEC has consistently found layering and spoofing activity to violate § 10(b) and Rule 10b-5.”).

²⁴⁹ See *Santa Fe Indus. v. Green*, 430 U.S. 462, 476 (1977).

²⁵⁰ Stock Market Manipulation, *supra* note 36, at 122.

²⁵¹ See Fletcher, *supra* note 119, at 484; Maxwell K. Multer, *Open-Market Manipulation under SEC Rule 10b-5 and its Analogues: Inappropriate Distinctions, Judicial Disagreement and Case Study: FERC’s Anti-Manipulation Rule*, 39 SEC. REG. L.J. 97 (2011).

²⁵² *Markowski v. SEC*, 274 F.3d 525, 528-29 (D.C. Cir. 2001).

²⁵³ See *Koch v. SEC*, 793 F.3d 147, 151 (D.C. Cir. 2015).

²⁵⁴ *ATSI Communications, Inc. v. Shaar Fund, Ltd.*, 493 F.3d 87 (2d Cir. 2007). *ATSI* was reaffirmed by the Second Circuit in *Fezzani v. Bear, Stearns & Co., Inc.*, 777 F.3d 566, 572 (2d Cir. 2015).

²⁵⁵ *GFL Advantage Fund, Ltd. v. Colkitt*, 272 F.3d 189, 205 (3d Cir. 2001).

information into the market such that it does not reflect the natural interplay of supply and demand.²⁵⁶

The waters were further muddled by two subsequent district court decisions²⁵⁷ which undermined the inaccurate information test by conflating it with the sole intent test. These decisions held that buying a stock solely to move the price contaminates the market with inaccurate information by sending a false signal that the buyer has legitimate economic motives for the transaction.²⁵⁸ The key outcome of these district court decisions is that “sole intent” invariably equates to “inaccurate information.”²⁵⁹

Overall, it remains unclear what the SEC or a private plaintiff must prove in order to establish open market manipulation under § 10(b) and Rule 10b-5. The lack of clarity echoes the conclusion of one commentator forty years ago that the law governing manipulation “has become an embarrassment—confusing, contradictory, complex, and unsophisticated.”²⁶⁰ This is problematic for cases involving spoofing and layering, because such conduct is a subset of open market manipulation.²⁶¹ While each of the SEC’s modern spoofing cases has settled without being tested at trial, and the settlements have been criticized for being unduly lenient,²⁶² this circuit conflict inevitably will require resolution.²⁶³

The ambiguity concerning § 10(b)’s application to open market manipulation also impacts spoofing and layering cases pursued by the CFTC. Recall that CEA § 6(c)(1) and Rule 180.1 were modeled on Exchange Action § 10(b) and Rule 10b-5, and the legislative history of § 6(c)(1) suggests that Congress intended to provide the CFTC with the same authority to pursue manipulation that the SEC already had under § 10(b). In this situation, the unsettled state of the law concerning open market manipulation in securities cases spills over to commodity markets.²⁶⁴ If specific intent is required to establish open market manipulation under § 10(b) and Rule 10b-5, then arguably specific intent also is required to establish scienter under CEA §

²⁵⁶ *ATSI*, 493 F.3d at 100; *GFL Advantage*, 272 F.3d at 205. *But cf.* Stock Market Manipulation, *supra* note 36, at 120 (arguing that Second and Third Circuits are no longer on same side of split).

²⁵⁷ *In re Amaranth Natural Gas Commod. Comm’n*, 587 F. Supp. 2d 513 (S.D.N.Y. 2008); *SEC v. Kwak*, No. 3:04-cv-1331, 2008 WL 410427 (D. Conn. Feb. 12, 2008).

²⁵⁸ *In re Amaranth*, 587 F. Supp. 2d at 534; *Kwak*, 2008 WL 410427, at *4.

²⁵⁹ David L. Kornblau, Allison Lurton & Jonathan M. Sperling, *Market Manipulation and Algorithmic Trading: The Next Wave of Regulatory Enforcement?*, 43 SEC. REG. & LAW REP. 369 (Feb. 20, 2012), https://www.cov.com/-/media/files/corporate/publications/2012/02/market_manipulation_and_algorithmic_trading.pdf.

²⁶⁰ Edward T. McDermott, *Defining Manipulation in Commodity Futures Trading: The Futures ‘Squeeze,’* 74 NW. U. L. REV. 202, 205 (1979).

²⁶¹ See Andrew Bauer & Sina Mansouri, Arnold & Porter Kaye Scholer LLP, *Criminal and Regulatory Enforcement of Market Manipulation Spikes* (July 21, 2016), https://www.arnoldporter.com/en/perspectives/publications/2016/07/2016_07_22_criminal_and_regulatory_enfor_1_30999 (“Spoofing and layering—both forms of open-market manipulation—continue to occupy the attention of regulators and commentators alike.”); Robert J. Anello & Richard F. Albert, *‘Spoofing’—the New Frontier for Criminal Prosecution?*, N.Y.L.J. (Dec. 1, 2015) (referring to spoofing as open market manipulative conduct).

²⁶² See Sanders, *supra* note 36, at 537 (“A review of the SEC’s spoofing enforcement actions to date shows that punishments have been quite lenient.”).

²⁶³ The Supreme Court ducked an opportunity to resolve the circuit split in 2016. See *Koch v. SEC*, 793 F.3d 147 (D.C. Cir. 2015), *cert. denied*, 136 S. Ct. 1492 (2016).

²⁶⁴ See Fletcher, *supra* note 119, at 485-86 (“The divergent approaches of the [SEC and CFTC] and the courts add an uncomfortable level of unpredictability to the markets and muddy an already chaotic corner of financial regulation.”).

6(c)(1) and Rule 180.1 in manipulation cases predicated on open market commodity transactions—contrary to the prevailing view that Rule 180.1 reduced the scienter standard from specific intent to recklessness in such cases.²⁶⁵

IV. Spoofing, Layering, and Cryptocurrency

Cryptocurrencies or virtual currencies²⁶⁶—including Bitcoin—provide a stark example of the obstacles inherent in policing spoofing and layering. Bitcoin was invented in 2009, has a futures market, and serves as a bellwether for the broader cryptocurrency market. In late 2017 Bitcoin rose to a record high of almost \$20,000 per coin. Just a few weeks later it had plunged to roughly a third of that value,²⁶⁷ and by November 2018 it had declined to \$4,000.²⁶⁸ This volatility has multiple causes, one of which probably is manipulation. A 2018 study concluded that price manipulation likely caused a prior huge spike in the U.S. dollar-Bitcoin exchange rate in 2013²⁶⁹ and such manipulation “remains quite feasible today.”²⁷⁰ More generally, spoofing has been characterized as “rampant” on some cryptocurrency trading platforms,²⁷¹ and in May 2018 the DOJ announced that it was probing whether traders are manipulating the price of Bitcoin and other virtual currencies.²⁷² This investigation—conducted in tandem with the CFTC—encompasses possible spoofing²⁷³ on the CME and elsewhere. By mid-2018 the CME and Chicago Board Options Exchange (CBOE) Futures Exchange were the two U.S. exchanges offering Bitcoin-based futures products,²⁷⁴ and Nasdaq plans to launch a Bitcoin futures product in 2019.²⁷⁵

²⁶⁵ See U.S. Market Manipulation, *supra* note 153 (“[T]he CFTC has offered no support for the notion that Congress intended for recklessness to apply in CEA market manipulation cases predicated on open market transactions. . .”).

²⁶⁶ The CFTC interprets the term “virtual currency” to “encompass any digital representation of value that functions as a medium of exchange and any other digital unit of account used a form of currency,” CFTC, *Advisory with Respect to Virtual Currency Derivative Product Listings*, CFTCLTR No. 18-14, 2018 WL 2387847, at *1 (CFTC May 21, 2018).

²⁶⁷ See Nathan Reiff, *What is Cryptocurrency Spoofing?* INVESTOPEDIA (June 6, 2018, 6:00 AM EDT), <https://www.investopedia.com/tech/what-cryptocurrency-spoofing/>.

²⁶⁸ Tom Zanki, *ICO Mania Cools Amid Regulatory Crackdown, Crypto Plunge*, LAW360 (Nov. 29, 2018, 7:34 PM EST), <https://www.law360.com/articles/1106131/ico-mania-cools-amid-regulatory-crackdown-crypto-plunge>.

²⁶⁹ See Neil Gandal, et al., *Price Manipulation in the Bitcoin Ecosystem*, 95 J. MONETARY ECON. 86, 86 (2018).

²⁷⁰ *Id.* at 96.

²⁷¹ See Lydia Beyoud, *Same Fraud, Different Asset: Spoofing Cases Guide Crypto Probe*, BLOOMBERG BNA (June 15, 2018), <https://www.bna.com/fraud-different-asset-n73014476564/>. See also Frances Coppola, *Cryptocurrency Trader Says the Market is Manipulated*, FORBES.COM (June 1, 2018, 7:10 AM), <https://www.forbes.com/sites/francescoppola/2018/06/01/cryptocurrency-trader-says-the-market-is-manipulated/#44753a925cde> (describing spoofing as “endemic” on Bitfinex and Coinbase/GDAX).

²⁷² See Matt Robinson & Tom Schoenberg, *U.S. Launches Criminal Probe into Bitcoin Price Manipulation*, BLOOMBERG.COM (May 24, 2018, 4:41 AM EDT), <https://www.bloomberg.com/news/articles/2018-05-24/bitcoin-manipulation-is-said-to-be-focus-of-u-s-criminal-probe>.

²⁷³ See Sharon Brown-Hruska, Jordan Milev & Trevor Wagener, *Crypto Market Surveillance Has Arrived*, LAW360 (May 25, 2018, 12:42 PM EDT), <http://www.nera.com/content/dam/nera/publications/2018/Crypto%20Market%20Surveillance%20Has%20Arrived%20-%20Law360.pdf> [hereinafter *Crypto Market Surveillance*].

²⁷⁴ Beyoud, *supra* note 271.

²⁷⁵ See Benjamin Bain, *Nasdaq Plans to Pursue Bitcoin Futures Despite Plunging Prices, Sources Say*, BLOOMBERG.COM (Nov. 27, 2018, 4:00 AM EST), <https://www.bloomberg.com/news/articles/2018-11-27/nasdaq-is-said-to-pursue-bitcoin-futures-despite-plunging-prices>.

By 2018 there were over 1,500 virtual currencies.²⁷⁶ One early obstacle to policing spoofing and layering in connection with these currencies has been confusion as to whether they are commodities subject to regulation by the CFTC or securities subject to regulation by the SEC. United States law does not provide for direct, comprehensive federal oversight of Bitcoin or other virtual currency spot²⁷⁷ or futures markets. In this vacuum federal regulation of cryptocurrency has evolved into a multifaceted, multi-regulatory approach.²⁷⁸ The CFTC was the regulator quickest to assert jurisdiction. In 2014 it declared virtual currencies to be commodities subject to oversight under its CEA authority.²⁷⁹ By early-2019 at least two federal district court decisions supported the Commission's position. In September 2018, the federal district court in Massachusetts held that the cryptocurrencies My Big Coin and Bitcoin categorically meet the definition of a commodity and fall within the jurisdiction of the CFTC, even though My Big Coin did not offer futures contracts.²⁸⁰ This decision was the outcome of a motion to dismiss, and thus might not be persuasive to other courts,²⁸¹ but it was consistent with another decision issued several months earlier by the Eastern District of New York.²⁸²

It is fair to conclude that by 2018 the CFTC had established itself as the primary regulator of virtual currencies in the United States.²⁸³ The CFTC's stance is that its jurisdiction is implicated whenever a virtual currency is used in a derivative contract, or if there is fraud or manipulation involving a virtual currency traded in interstate commerce.²⁸⁴ While the CFTC does not have regulatory jurisdiction under the CEA over markets or platforms conducting spot transactions in virtual currencies or over participants on such platforms, it does have enforcement jurisdiction in virtual currency derivatives markets and in underlying virtual currency spot

²⁷⁶ CFTC v. McDonnell, 287 F. Supp. 3d 213, 219 (E.D.N.Y. 2018). "Virtual currency" and "cryptocurrency" are essentially synonymous terms. *See id.* at 218.

²⁷⁷ A spot transaction provides for the immediate sale and delivery of a commodity. *See* CFTC v. Erskine, 512 F.3d 309, 321 (6th Cir. 2008). Spot transactions are subject to the CEA's anti-manipulation provisions and CFTC's rules to the extent that their actual or attempted manipulation affects prices in a commodity interest such as a futures contract. *See, e.g.*, 7 U.S.C. § 9, 15 (2018).

²⁷⁸ U.S. Commodity Futures Trading Comm'n, *CFTC Backgrounder on Oversight of and Approach to Virtual Currency Futures Markets* (Jan. 4, 2018), https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/backgrounder_virtualcurrency01.pdf.

²⁷⁹ *See* Testimony of CFTC Chairman Timothy Massad before the U.S. Senate Comm. on Agriculture, Nutrition and Forestry (Dec. 10, 2014), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opamassad-6> [hereinafter Massad 2014 Testimony]. *See also* In re BFXNA, Inc., CFTC Docket No. 16-19, at 5-6 (June 2, 2016) ("[V]irtual currencies are encompassed in the [CEA] definition and properly defined as commodities."); In re Coinflip, Inc., CFTC Docket No. 15-29, at 3 (Sept. 17, 2015) (same).

²⁸⁰ CFTC v. My Big Coin Pay, Inc., Civ. Action No. 18-10077-RWZ, 2018 WL 4621727, at *4-5 (D. Mass. Sept. 26, 2018).

²⁸¹ *See* J. Paul Forrester & Matthew Bisanz, *Virtual Currencies as Commodities?*, HARV. L. SCH. FORUM. ON CORP. GOV. AND FIN. REG., (Dec. 3, 2018), <https://corpgov.law.harvard.edu/2018/12/03/virtual-currencies-as-commodities/> (questioning persuasive impact of *My Big Coin Pay*).

²⁸² *See* CFTC v. McDonnell, 287 F. Supp. 3d 213, 228 (E.D.N.Y. 2018) ("Virtual currencies can be regulated by CFTC as a commodity.").

²⁸³ Douglas Arend & Jeffery Henderson, *Virtual Currency as Commodity: From Coinflip to McDonnell*, LAW360 (Mar. 18, 2018, 2:16 PM EDT), <https://www.law360.com/articles/1023244/virtual-currency-as-commodity-from-coinflip-to-mcdonnell>.

²⁸⁴ *See* CFTC, *A CFTC Primer on Virtual Currencies* 11 (Oct. 17, 2017), https://www.cftc.gov/sites/default/files/idc/groups/public/documents/file/labcftc_primercurrencyes100417.pdf.

markets.²⁸⁵ In fiscal year 2018 the CFTC’s Division of Enforcement brought eleven cases related to virtual currency, representing about 13% of the Division’s total number of enforcement actions.²⁸⁶

The CFTC shares the virtual currency regulatory space, as it does with regard to a few other products.²⁸⁷ The SEC has asserted jurisdiction over schemes in which virtual currencies operate as securities, as in many Initial Coin Offerings (ICOs).²⁸⁸ ICOs typically raise funds by selling tokens (a type of cryptocurrency) to investors, rather than selling stock. In the first half of 2018 there were 56 ICOs that raised more than \$1 billion in the United States, compared to 87 ICOs that raised \$1.7 billion for the full year 2017, and billions more have been raised overseas.²⁸⁹ While the SEC has pursued a few enforcement actions relating to ICOs, it has not announced an operational test for determining whether a virtual currency or digital asset is a security. The Internal Revenue Service, DOJ, Treasury Department, and state agencies also have asserted regulatory jurisdiction with respect to cryptocurrencies.²⁹⁰

A second obstacle to effective policing is the difficulty of conducting market surveillance sufficient to detect spoofing and layering in the cryptocurrency market. Regulators such as the CFTC generally identify spoofing and other forms of market manipulation by conducting market surveillance.²⁹¹ The fundamental surveillance problem in virtual currency markets is that the same currency can be traded on multiple venues. Stocks also can be traded on multiple venues, but the surveillance problem for equities is reduced because the venues agree to share their quote data with a common host, which currently is FINRA. FINRA can pool the data and use it to identify cross-venue spoofing in equities markets. No such common host exists for cryptocurrency markets, and this void renders detection of cross-venue cryptocurrency spoofing virtually impossible.²⁹² Even if a common host did exist, it would confront the additional hurdle of linking accounts across multiple venues which employ unique account numbers to identify customer bids and offers. The host would have no viable way to link different accounts at different venues.²⁹³ The surveillance problem is further magnified because cryptocurrency

²⁸⁵ Written Testimony of Chairman J. Christopher Giancarlo before the Senate Banking Comm. (Feb. 6, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo37>.

²⁸⁶ Nowell D. Bamberger, Robin M. Bergen & Emily Michael, Cleary Gottlieb Steen & Hamilton LLP, Cleary Enforcement Watch, *Virtual Currencies, Manipulation, Cooperation, and More: CFTC Enforcement Division’s 2018 Annual Report* (Nov. 26, 2018), <https://www.clearyenforcementwatch.com/2018/11/virtual-currencies-manipulation-cooperation-cftc-enforcement-divisions-2018-annual-report/> [hereinafter Cleary Enforcement Watch].

²⁸⁷ See, e.g., U.S. Commodity Futures Trading Comm’n, Security Futures Products, <https://www.cftc.gov/IndustryOversight/ContractsProducts/SecurityFuturesProduct/index.htm> (describing joint regulation of SFPs) (last visited Mar. 15, 2019).

²⁸⁸ Cleary Enforcement Watch, *supra* note 286; Dean Seal, *SEC Hasn’t Shown Crypto Tokens are Securities*, Judge Says, LAW360 (Nov. 27, 2018, 9:08 PM EST), <https://www.law360.com/articles/1105406/sec-hasn-t-shown-crypto-tokens-are-securities-judge-says> (noting that “courts have largely concluded that ICO tokens are securities subject to the SEC’s enforcement powers”).

²⁸⁹ See PricewaterhouseCoopers, *Initial Coin Offerings: A Strategic Perspective* 4 (June 2018), https://cryptovalley.swiss/wp-content/uploads/20180628_PwC-S-CVA-ICO-Report_EN.pdf.

²⁹⁰ CFTC v. McDonnell, 287 F. Supp. 3d 213, 222 (E.D.N.Y. 2018).

²⁹¹ Crypto Market Surveillance, *supra* note 273.

²⁹² Trillium Management, *The Challenges of Crypto Trade Surveillance* (May 24, 2018), <https://www.trlm.com/the-challenges-of-crypto-trade-surveillance/>.

²⁹³ *Id.*

trading is fragmented on dozens of international platforms—many of which are not registered with the CFTC or SEC.²⁹⁴

V. The Spoofing Prohibition is Not Unconstitutionally Vague

Defendants have argued in multiple cases that the DFA’s prohibition on spoofing is unconstitutionally vague. This was one of the primary contentions advanced by *Coscia*²⁹⁵ and other defendants have followed his lead.²⁹⁶ The argument rests partially on the fact that whereas § 4c(a)(5)(C) prohibits both spoofing and conduct that is “of the character” of spoofing,²⁹⁷ neither the CEA nor the Interpretive Guidance define the latter.²⁹⁸ This omission has enabled defendants to argue that the anti-spoofing provision is void for vagueness, because “[a] fundamental principle in our legal system is that laws which regulate persons or entities must give fair notice of conduct that is forbidden or required.”²⁹⁹

Defendants raising such an argument face a steep hurdle, for multiple reasons. First, when reviewing a vagueness challenge, a court operates under the strong presumption that a law passed by Congress is valid.³⁰⁰ Second, economic regulation—such as CEA § 4c(a)(5)(C)—is subject to less rigorous vagueness scrutiny than non-economic regulation.³⁰¹ Third, generally a scienter requirement—such as that imposed by § 4c(a)(5)(C)—saves a statute from unconstitutional vagueness.³⁰² Fourth, a statute is not void for vagueness if its application is unclear at the margins.³⁰³ Fifth, when the law in question does not implicate First Amendment rights—which § 4c(a)(5)(C) does not—a court must review a vagueness challenge on an as-applied basis, and not with regard to the statute’s facial validity.³⁰⁴

The Seventh Circuit’s 2017 decision in *Coscia* was the first appellate opinion to address the constitutionality of the CEA’s spoofing prohibition. As noted by the Seventh Circuit, to satisfy the Fifth Amendment’s Due Process Clause³⁰⁵ a penal statute must define a criminal offense (1) with sufficient definiteness that ordinary people can understand what conduct is prohibited and (2) in a manner that does not encourage arbitrary and discriminatory

²⁹⁴ Matt Robinson & Tom Schoenberg, *U.S. Launches Criminal Probe into Bitcoin Price Manipulation*, BLOOMBERG.COM (May 24, 2018, 4:41 AM EDT), <https://www.bloomberg.com/news/articles/2018-05-24/bitcoin-manipulation-is-said-to-be-focus-of-u-s-criminal-probe>.

²⁹⁵ See *Coscia*, 866 F.3d at 790-95.

²⁹⁶ See, e.g., *United States v. Flotron*, No. 3:17-cr-00220 (JAM), 2018 WL 1401986, *5 (D. Conn. Mar. 20, 2018) (denying motion to dismiss superseding indictment for alleged spoofing of precious metals market); *CFTC v. Oystacher*, 203 F. Supp. 3d 934 (N.D. Ill. 2016) (rejecting vagueness challenge).

²⁹⁷ 7 U.S.C. § 6c(a)(5)(C) (2018).

²⁹⁸ The argument is undercut by the fact that Congress also used the phrase “of the character of, or is commonly known to the trade as” multiple times elsewhere in the CEA. The phrase is used to refer to an option, privilege, indemnity, bid, offer, put, call, advance guaranty, and decline guaranty. See 7 U.S.C. § 6c(b) (2018). Like spoofing, these items are not susceptible to precise definition. The phrase also is used to refer to wash sales. See 7 U.S.C. § 6c(a) (2018).

²⁹⁹ *FCC v. Fox Television Stations*, 567 U.S. 239, 253 (2012). *Accord Brown v. Chicago Bd. of Educ.*, 824 F.3d 713, 716-17 (7th Cir. 2016).

³⁰⁰ *United States v. Nat’l Dairy Prods. Corp.*, 372 U.S. 29, 32 (1963).

³⁰¹ *Vill. of Hoffman Estates v. Flipside, Hoffman Estates, Inc.*, 455 U.S. 489, 498 (1982).

³⁰² *Advance Pharm. Inc. v. United States*, 391 F.3d 377, 398 (2d Cir. 2004).

³⁰³ *United States v. Williams*, 553 U.S. 285, 306 (2008).

³⁰⁴ *United States v. Rybicki*, 354 F.3d 124, 129 (2d Cir. 2003).

³⁰⁵ U.S. CONST. AMEND. V.

enforcement.³⁰⁶ With respect to the first requirement, the Seventh Circuit held that the CEA gave sufficient notice to Coscia of the prohibited conduct because the statute includes a parenthetical definition of spoofing which makes clear the term means “bidding or offering with the intent to cancel the bid or offer before execution.”³⁰⁷ This holding resolved the open question of whether the parenthetical is the definition of spoofing or merely an example of it, and rendered irrelevant the statute’s lack of legislative history.³⁰⁸

With respect to the second requirement—that a statute not be enforced arbitrarily—the Seventh Circuit noted that a party who engages in some conduct that is clearly proscribed cannot complain that the statute is vague as applied to others.³⁰⁹ Coscia had no basis to argue arbitrary enforcement because his conduct clearly fell within the confines of the conduct prohibited by the amended CEA.³¹⁰ According to the Seventh Circuit, the evidence was clear that Coscia intended to cancel his orders because he commissioned a program to pump or deflate the market through the use of large orders that were specifically designed to be cancelled if they ever risked being filled.³¹¹ Finally, the court held in the alternative that the CEA did not permit arbitrary enforcement. The court underscored that arbitrary enforcement is rarely a concern if a statute requires the government to prove intent,³¹² and the CEA does so. The CEA limits prosecution to those persons who possess the requisite specific intent to cancel orders at the time they were placed.³¹³ This requirement renders spoofing materially different from such legal trades as stop-loss orders and fill or kill orders, “because those orders are designed to be executed upon the arrival of certain subsequent events.”³¹⁴

The Seventh Circuit’s decision in *Coscia* concerning the constitutionality of the CEA’s spoofing provision is significant because it is unanimous, persuasive, and the first such appellate ruling. Moreover, the opinion was issued by a court whose jurisdiction encompasses Chicago, where CME’s computer servers are located and the vast majority of domestic commodity futures trading occurs. Illinois is home to more than two-thirds of all futures market registrants in the United States.³¹⁵ It is no coincidence that by June 2018, eleven traders had been criminally charged with spoofing in the futures markets and nine of those eleven had been charged in Chicago.³¹⁶

Still, the Seventh Circuit’s decision is troubling. First, it leaves unresolved the issue of what exactly constitutes trading conduct “of the character of” or “commonly known to the trade as” spoofing.” Second, while the Seventh Circuit focused on Cosica’s intent to evade execution

³⁰⁶ 866 F.3d at 790. *Accord* Skilling v. United States, 561 U.S. 358, 402-03 (2010).

³⁰⁷ 866 F.3d at 791-93.

³⁰⁸ *Id.* at 793.

³⁰⁹ 866 F.3d at 794.

³¹⁰ *Id.*

³¹¹ *Id.*

³¹² *Id.*

³¹³ *Id.* *Accord* CFTC v. Oystacher, 203 F. Supp. 3d 934, 943 (N.D. Ill. 2016) (holding that spoofing statute’s scienter requirement “mitigates any vagueness concerns”).

³¹⁴ 866 F.3d at 795.

³¹⁵ Marcus Christian, *DOJ’s 1st Anti-Spoofing Prosecution Reflects 2 Trends*, LAW360 (Oct. 23, 2014, 10:19 AM ET).

³¹⁶ Clifford Histed, Vincente Martinez & Lexi Bond, *Breaking Down the 2nd Criminal Spoofing Trial: Part 2*, LAW360 (June 12, 2018, 1:25 PM EDT), <https://www.law360.com/articles/1052048/breaking-down-the-2nd-criminal-spoofing-trial-part-2>.

of his spoof trades, the court did not clearly distinguish between spoofing and alternative, acceptable trading practices that are designed to avoid execution for reasons unrelated to market manipulation.³¹⁷

Third, the decision leaves unresolved the issue of how intent can be established in the absence of overwhelming statistical evidence of such factors as execution rates, order-to-trade size ratios, and order duration. The government introduced evidence during Coscia's trial showing that: (1) only 0.08% of his large orders on the CME, and 0.5% of his large orders on Intercontinental Exchange Futures U.S. (ICE), were executed,³¹⁸ (2) his average order was much larger than his average trade,³¹⁹ and (3) only 0.57% of his large orders were exposed for more than one second, compared to 65% of the large orders entered by other market participants.³²⁰ On the basis of these facts, plus evidence of two software programs that Coscia had commissioned to facilitate his trading scheme,³²¹ the Seventh Circuit concluded that a rational jury easily could have found that, at the time he placed his orders, Coscia intended to cancel them before execution.³²² This conclusion suggests the question of how the government can prove intent absent powerful statistical evidence.

Fourth, while an order-to-trade ratio is an uncomplicated metric, the Seventh Circuit failed to clarify which ratios would constitute compelling evidence of intent. For example, Coscia's order-to-trade ratio of 1,592% was five times greater than the highest order-to-trade ratio of 264% observed in other market participants.³²³ This comparison is persuasive, but if a defendant's order-to-trade ratio was, say, 500%, could a rational jury easily find that, at the time he placed his orders, he had the intent to cancel them before execution?³²⁴ The Seventh Circuit did not draw a line or define a range. This failure reflects the fact that, as acknowledged by one former CFTC Commissioner, "trade data may not be enough to support a finding of intent in a spoofing matter."³²⁵ Indeed, in the second criminal spoofing case to go to trial, former UBS precious metals futures trader Andre Flotron³²⁶ was acquitted by a jury in April 2018 despite the government's presentation of extensive trading data.³²⁷ The government had examined hundreds

³¹⁷ See Annette L. Nazareth, et al., Davis Polk & Wardwell LLP, FinRegReform, *Spoofing Rule Governing Commodities Trading Survives Constitutional Vagueness Challenge in the Seventh Circuit* (Aug. 14, 2017), <https://www.finregreform.com/single-post/2017/08/14/spoofing-rule-governing-commodities-trading-survives-constitutional-vagueness-challenge-in-the-seventh-circuit/> ("[T]here is still significant uncertainty as to where regulators and the courts will draw the line between legitimate trading and spoofing. . . .").

³¹⁸ 866 F.3d at 796.

³¹⁹ *Id.*

³²⁰ *Id.*

³²¹ *Id.* at 789.

³²² *Id.* at 796.

³²³ *Id.*

³²⁴ See Cleary Gottlieb Steen & Hamilton LLP, Alert Memorandum, *Seventh Circuit Upholds First-Ever Federal Spoofing Conviction* (Aug. 10, 2017), <https://www.clearygottlieb.com/-/media/organize-archive/cgsh/files/2017/publications/alert-memos/seventh-circuit-upholds-first-ever-federal-spoofing-conviction-8-10-17.pdf>.

³²⁵ See Behnam Remarks, *supra* note 55. Accord Histed, Martinez & Bond, *supra* note 316 ("[I]t may be highly doubtful that the government can win a [spoofing] trial based only on statistics and trade patterns.").

³²⁶ See U.S. Commodity Futures Trading Comm'n, Press Release No. 7685-18, *CFTC Charges Andre Flotron with Spoofing and Engaging in a Deceptive and Manipulative Scheme in the Precious Metals Futures Markets* (Jan. 29, 2018), <https://www.cftc.gov/PressRoom/PressReleases/pr7685-18>.

³²⁷ Peter J. Henning, DealBook, *The Problem with Prosecuting 'Spoofing,'* N.Y. TIMES (May 3, 2018), <https://www.nytimes.com/2018/05/03/business/dealbook/spoofing-prosecuting-andre-flotron.html>.

of thousands of Flotron's past COMEX trades, which were placed manually, to identify several hundred sequences that it alleged matched a spoofing pattern.³²⁸ This evidence was not persuasive to the jury. Or, perhaps, the jury could not decipher what they reviewed.³²⁹

VI. Liability for Failure to Supervise

Spoofing and layering often occur in the absence of effective supervision, and sometimes with the knowledge and consent of supervisory personnel.³³⁰ Historically, CME has failed to discipline employers for spoofing conducted by their traders,³³¹ whereas the SEC and CFTC have somewhat more aggressively pursued enforcement in spoofing and layering cases based on theories of failure to supervise.

The SEC has targeted spoofing and layering in equities markets by accusing broker-dealers whose accounts were used by others to engage in these trading practices of violating the agency's Market Access Rule³³² and/or other supervisory requirements. The Market Access Rule—adopted by the SEC effective in January 2011—requires that, as gatekeepers to the financial markets, broker-dealers that access an exchange or an alternative trading system or provide their customers with access to these trading venues must adequately control the financial and regulatory risks of providing such access.³³³ Broker-dealers providing market access must implement procedures to prevent spoofing and layering and a failure to do so could constitute a violation. The Market Access Rule was adopted by the SEC primarily to address the financial and regulatory risks stemming from the proliferation of HFT. The objective is to prevent firms from jeopardizing their own financial condition and that of other market participants, while ensuring the stability and integrity of the U.S. financial system and securities markets.³³⁴ FINRA has asserted that it will be vigilant regarding compliance with the Market Access Rule³³⁵ and it

³²⁸ See Jon Hill, *Ex-Trader's Acquittal Shines Spotlight on Evidence of Intent*, LAW360 (Apr. 7, 2018, 4:54 PM EDT), <https://www.law360.com/articles/1037563/ex-trader-s-acquittal-shines-spotlight-on-evidence-of-intent>.

³²⁹ See Jonathan S. Kolodner, et al., Cleary Gottlieb Steen & Hamilton LLP, Cleary Enforcement Watch, *Acquittal of Former UBS Trader Signals Potential Challenges for Government's Anti-Spoofing Initiative* (Apr. 30, 2018), <https://www.clearyenforcementwatch.com/2018/04/acquittal-former-ubs-trader-signals-potential-challenges-governments-anti-spoofing-initiative/> (underscoring that in spoofing cases, patterns extracted from trade and market data “can be difficult for juries to decipher”). There is another possible explanation for the outcome in *Flotron* that is independent of the jury's comprehension, or lack thereof, of trading data. By the time the trial commenced the substantive counts of the indictment had been dismissed, so Flotron was tried only on one count of conspiracy to commit commodity fraud by means of spoofing. It is likely that the jury merely failed to find beyond a reasonable doubt that Flotron entered into the requisite agreement. See Clifford Histed, Vincente Martinez & Lexi Bond, *Breaking Down the 2nd Criminal Spoofing Trial: Part 1*, LAW360 (June 11, 2018, 1:27 PM EDT), <https://www.law360.com/articles/1051835/breaking-down-the-2nd-criminal-spoofing-trial-part-1>.

³³⁰ See, e.g., Jody Godoy, *Ex-JPMorgan Metals Trader Cops to 6-Year Spoofing Scheme*, LAW360 (Nov. 6, 2018, 7:40 PM EST), <https://www.law360.com/articles/1099481/ex-jpmorgan-metals-trader-cops-to-6-year-spoofing-scheme> (reporting that former precious metals trader pleading guilty to spoofing scheme stated that “he personally deployed this strategy hundreds of times with the knowledge and consent of his immediate supervisors”).

³³¹ Marc Nagel, *Failure to Supervise: Spoofing and Wash Sales*, MODERN TRADER (Feb. 22, 2016).

³³² See 17 C.F.R. § 240.15c3-5, Risk Management Controls for Brokers or Dealers with Market Access, 75 Fed. Reg. 69792 (Nov. 15, 2010) (Final Rule Release).

³³³ See *id.*

³³⁴ Financial Industry Regulatory Authority, News Release, *FINRA, Bats, NASDAQ, and NYSE Fine Firms for Market Access Rule Violations* (July 27, 2017), <http://www.finra.org/newsroom/2017/finra-bats-nasdaq-and-nyse-fine-firms-market-access-rule-violations>.

³³⁵ See Morgan, Lewis & Bockius LLP, *Trading and Markets Enforcement Report 3* (Aug. 2016), <https://www.morganlewis.com/pubs/trading-and-markets-enforcement-report-aug-2016>.

has initiated disciplinary proceedings in spoofing and layering cases predicated on Rule violations,³³⁶ but compliance overall has been reported as low.³³⁷

A CFTC registrant may be liable for a failure to supervise under 17 C.F.R. § 166.3, which establishes a duty to diligently supervise activities of the registrant's partners, officers, employees, and agents.³³⁸ Regulation 166.3 was issued in 1978 and the subsequent interpretive case law is well settled in favor of an expansive scope. Failure to supervise is an independent violation of CFTC regulations and liability may attach even absent an underlying CEA violation.³³⁹ (In contrast, liability for failure to supervise under the Exchange Act does require an underlying substantive violation of securities law.)³⁴⁰ Regulation 166.3 does not impose strict liability. Instead, courts apply a reasonableness standard.³⁴¹ An offense requires a showing that either (1) the registrant's supervisory system was generally inadequate; or (2) the registrant failed to perform its supervisory duties diligently.³⁴² The duty to supervise includes ensuring that employees receive sufficient training and their activities are monitored through systems and controls adequate to detect spoofing.³⁴³ This monitoring can entail either pre-trade surveillance (to validate trade instructions) or post-trade surveillance (which often uses rule-based parameter models to generate alerts)—both of which suffer from limitations.³⁴⁴

In January 2017 the CFTC filed its first settled action against a registered firm—Citigroup—for supervision failures related to spoofing, and imposed a civil penalty of \$25 million.³⁴⁵ Six months later the CFTC announced non-prosecution agreements (NPAs) with three Citigroup traders who learned spoofing techniques from Citigroup senior traders and engaged in

³³⁶ See, e.g., FINRA, News Release, *FINRA and Exchanges Charge Lek Securities and CEO Samuel F. Lek with Aiding and Abetting Securities Fraud* (Mar. 27, 2017), <http://www.finra.org/newsroom/2017/finra-exchanges-charge-lek-securities-its-ceo-aiding-abetting-securities-fraud>.

³³⁷ See Rachel Wolcott, *Special Report: Are U.S. Regulators Ahead of European Counterparts in Tackling Tech-Enabled Market Abuse?*, THOMSON REUTERS ACCELUS (June 22, 2017), <https://www.vedderprice.com/-/media/files/news/2017/06/thomson-reuters-accelusare-us-regulators-ahead-of.pdf?la=en>.

³³⁸ 17 C.F.R. 166.3 (2018).

³³⁹ See, e.g., In the Matter of Citigroup Global Markets Inc., CFTC Docket No. 17-06, at 4 (C.F.T.C. Jan. 19, 2017); In the Matter of GNP Commodities Inc., CFTC Docket No. 89-1, 1992 WL 201158, at *24 n.11 (C.F.T.C. Aug. 11, 1992).

³⁴⁰ See 15 U.S.C. § 78o(b)(4)(E) (2018).

³⁴¹ Gregory Scopino, *Do Automated Trading Systems Dream of Manipulating the Price of Futures Contracts? Policing Markets for Improper Trading Practice by Algorithmic Robots*, 67 FLA. L. REV. 221, 277 (2015).

³⁴² See, e.g., In re Collins, CFTC Docket No. 94-13, 1997 WL 761927, at *10 (C.F.T.C. Dec. 10, 1997) (“Moreover, in appropriate circumstances, a showing that the registrant lacks an adequate supervisory system can be sufficient to establish a breach of duty under Rule 166.3.”); Paul J. Pantano, Jr., Neal E. Kumar & Stephanie L. Klock, *The Duty of Diligent Supervision: To Whom and What Does it Apply and What Does it Require?*, 37 FUT. & DERIV. L. REP. (Dec. 2017), https://www.willkie.com/~media/Files/Publications/2018/01/The_Duty_of_Diligent_Supervision_To_Whom_And_What_Does_It_Apply_And_What_Does_It_Require.pdf.

³⁴³ See Behnam Remarks, *supra* note 55.

³⁴⁴ James G. Lundy, Nicholas A.J. Wendland & Jay A. Biondo, *Spoofing, Surveillance & Supervision*, CURRENTS (May 2018), <https://www.drinkerbiddle.com/insights/publications/2018/05/spoofing-surveillance-and-supervision>.

³⁴⁵ See In re Citigroup Global Markets, Inc., CFTC Docket No. 17-06, at 2 (C.F.T.C. Jan. 19, 2017) (finding that Citigroup violated Regulation 166.3 in spoofing case because it “failed to diligently supervise its employees and agents”).

the spoofing that resulted in Citigroup's fine.³⁴⁶ Whereas the SEC has been using NPAs since 2010 and the DOJ since the early 1990s, these were the first NPAs ever entered into by the CFTC.³⁴⁷ Perhaps the CFTC's mixed message in connection with Citigroup was designed to motivate traders under investigation for spoofing to tag their firms for failures to adequately train and supervise.³⁴⁸ Charging firms for supervision failures "now appears to be a standard part of the CFTC's 'playbook' in spoofing cases."³⁴⁹ However, a Regulation 166.3 violation does not give rise to a private right of action.³⁵⁰

VII. Do the Prohibitions on Spoofing and Layering Apply Only to Traders?

As indicated *supra*,³⁵¹ in January 2018 the DOJ announced that seven individuals had been charged with the crime of spoofing. Previously, only three other individuals had ever been publicly charged with such a crime.³⁵² When the DOJ made its announcement it noted that, in addition to identifying and prosecuting the individual traders who engage in spoofing, it would seek to find and hold accountable "those who teach others how to spoof, who build the tools designed to spoof, or who otherwise aid and abet the wrongdoing."³⁵³ One of the seven individuals criminally charged was Jitesh Thakkar, a software developer who allegedly designed computer programs used in a spoofing scheme. The trader he assisted appears to have been Sarao, who previously pled guilty to criminal charges of spoofing the market for E-mini S&P futures contracts³⁵⁴ traded on the CME between 2010 and 2015. Thakkar was the first individual charged with a criminal spoofing violation of CEA § 4c(a)(5)(C) who did not trade.

The criminal and related civil charges against Thakkar reflect a novel front in the war against spoofing, but the charges are based on familiar theories—aiding and abetting and control person liability, as a controlling person in civil co-defendant Edge Financial Technologies.³⁵⁵

³⁴⁶ See CFTC, *CFTC Enters into Non-Prosecution Agreements with Former Citigroup Global Markets Inc. Traders Jeremy Lao, Daniel Liao, and Shlomo Salant*, Release No. 7581-17 (June 29, 2017), <https://www.cftc.gov/PressRoom/PressReleases/pr7581-17>.

³⁴⁷ Rachel M. Cannon & Kristina Y. Liu, *Why the CFTC's New Use of NPAs is Significant*, LEXOLOGY (Aug. 8, 2017), <https://www.lexology.com/library/detail.aspx?g=f25da18a-4ef5-4865-a9bb-308f82a04bc2>.

³⁴⁸ See Lundy, Wendland & Biondo, *supra* note 344.

³⁴⁹ See James G. Lundy & Antonio M. Pozos, *The CFTC and DOJ Crack Down Harder on Spoofing & Supervision*, SEC. L. PERSPECTIVES (Feb. 6, 2018), <http://securitieslawperspectives.com/cftc-doj-crack-harder-spoofing-supervision/>.

³⁵⁰ See, e.g., *Bennett v. E. F. Hutton Co.*, 597 F. Supp. 1547 (N.D. Ohio 1984); *CFTC v. Commodities Fluc. Systems*, 583 F. Supp. 1382 (S.D.N.Y. 1982).

³⁵¹ Section I(B), *supra*.

³⁵² U.S. Dep't of Justice, Press Release, *Eight Individuals Charged with Deceptive Trading Practices Executed on U.S. Commodities Markets* (Jan. 29, 2018), <https://www.justice.gov/opa/pr/eight-individuals-charged-deceptive-trading-practices-executed-us-commodities-markets>.

³⁵³ *Id.*

³⁵⁴ The E-mini contract "attracts the highest dollar volume among U.S. equity index products (futures, options, or exchange-traded funds)." Andrei Kirilenko, et al., *The Flash Crash: High-Frequency Trading in an Electronic Market*, 72 J. FIN. 967, 973 (2017). The product is designed to hedge exposure to the future performance of stocks in the S&P 500, which represents approximately 75% of the market capitalization of U.S.-listed equities. The E-mini contract was introduced by the CME in 1997, trades exclusively on the CME Globex electronic trading platform, and is CME's most actively traded product. A typical day may see more than 700,000 transactions in the E-mini S&P 500. Massad 2015 Testimony, *supra* note 58; Market Events Findings, *supra* note 14, at 10.

³⁵⁵ See Criminal Complaint, *United States v. Thakkar*, Case No. 1:18-cr-00030 (N.D. Ill. Jan. 19, 2018); Complaint, at 17-20, *CFTC v. Thakkar*, Case No. 1:18-cv-00619 (N.D. Ill. Jan. 28, 2018).

The CEA provides for both aiding and abetting liability—in a provision³⁵⁶ that is modeled on the federal statute for criminal aiding and abetting liability³⁵⁷—and control person liability.³⁵⁸ The Seventh Circuit stated in *Coscia* that “prosecution is thus limited to the pool of traders who exhibit the requisite criminal intent,”³⁵⁹ and Thakkar seized on this statement, but it is dicta. The potential liability of non-traders was not an issue in *Coscia*.

There is no compelling reason why spoofing liability should not extend to software developers and other non-traders. Thakkar’s motion to dismiss his indictment was denied and his trial is scheduled for April 2019.³⁶⁰

VIII. Detecting and Proving Spoofing and Layering

A major obstacle to anti-spoofing enforcement is that the behavior can be, and often is, difficult to detect and prove. This is particularly true when the spoofing is distributed across asset classes. The next section of this Article examines this obstacle.

A. Evidence of Spoofing and Layering

Detecting spoofing and later proving intent are two of the primary hurdles confronted by the government in a spoofing case. Absent contemporaneous direct evidence in the form of emails, instant messages, or telephone recordings,³⁶¹ the government generally will be required to prove intent using circumstantial evidence, such as the number and pattern of submitted orders, the length of time orders remained active prior to cancellation, and the nature of the trader’s methodology.³⁶² Circumstantial evidence of intent is as probative as direct evidence³⁶³—and *Coscia*’s conviction was upheld by the Seventh Circuit primarily on the basis of the former—but evidence of trading patterns can be difficult to collect and analyzing patterns requires the ability to manage vast quantities of data.³⁶⁴

³⁵⁶ 7 U.S.C. § 13c(a) (2018).

³⁵⁷ See 18 U.S.C. § 2 (2018); *In re Amaranth Natural Gas Commod. Litig.*, 730 F.3d 170, 181 (2d Cir. 2013) (noting that CEA provision is modeled on federal criminal provision).

³⁵⁸ 7 U.S.C. § 13c(b) (2018). More generally, targeting software developers also is consistent with current FINRA Rule 1220, approved by the SEC, which beginning in 2017 requires registration as a Securities Trader for any individual who is (1) primarily responsible for the design, development, or significant modification of an algorithmic trading strategy relating to equity, preferred, or convertible debt securities; or (2) responsible for the day-to-day supervision or direction of such activities. FINRA, FINRA Manual, FINRA Rules, Rule 1220 (Registration Categories), http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=10203 (last visited Mar. 15, 2019).

³⁵⁹ 866 F.3d at 794.

³⁶⁰ Lauraann Wood, *Software Exec Must Face Spoofing Charges for Use of Tech*, LAW360 (Aug. 22, 2018, 9:46 PM EDT), <https://www.law360.com/articles/1075800/software-exec-must-face-spoofing-charges-for-use-of-tech>.

³⁶¹ See Daniel Waldman, *Has the Law of Manipulation Lost its Moorings?*, LAW360 (Apr. 7, 2017, 3:50 PM EDT), <https://www.law360.com/articles/911280> (“With the emergence of email, texting, tape recording and social media, gathering evidence of intent has never been easier.”).

³⁶² Matthew J. Kluchenek & Jacob L. Kahn, *Deterring Disruption in the Derivatives Markets: A Review of the CFTC’s New Authority Over Disruptive Trading Practices*, 3 HARV. BUS. L. REV. ONLINE 120, 125 (2013).

³⁶³ *United States v. Cunningham*, 54 F.3d 295, 299 (7th Cir. 1995).

³⁶⁴ See 2018 Budget Request, *supra* note 53, at 2 (“Today, analyzing trading patterns requires the ability to handle massive quantities of data. . . .”). *But cf.* Gina-Gail S. Fletcher, *Benchmark Regulation*, 102 IOWA L. REV. 1929, 1940 (2017) (asserting that spoofing can be quickly detected by regulators).

The obstacles mount when multiple brokers cooperate to spoof, using multiple accounts. Parallel criminal and civil actions commenced in December 2016 involved two brokers who allegedly used 35 different accounts at six different brokerage firms to conduct and conceal their spoofing and layering scheme.³⁶⁵ Another criminal case that involved allegations of coordinated spoofing was resolved a few months later, in June 2017, when the DOJ entered into a plea agreement with trader David Liew. Liew admitted in his agreement that from December 2009 to February 2012 he conspired with other precious metals traders to spoof on hundreds of occasions.³⁶⁶ While his former employer was not identified in the document, it appears to have been Deutsche Bank.³⁶⁷ Liew also settled a related civil action commenced by the CFTC by agreeing to a permanent trading ban in CFTC-regulated markets.³⁶⁸

Coordinated spoofing subsequently emerged as a trend in the United States³⁶⁹ and it is particularly difficult to detect (and prove). On the proof side, chat room conversations can be highly suggestive of coordinated cross-trader spoofing.³⁷⁰ The electronic record of such conversations has been a central component of many spoofing cases.³⁷¹ Increasingly, however, traders rely on encrypted messaging apps such as Signal, Telegram, and WhatsApp—some of which allow for self-destructing messages—to thwart prosecution.³⁷²

FINRA has tried to address the detection problem. FINRA conducts on its own behalf surveillance of the trading activity of its 3,800 registered broker-dealer members, as well as some degree of surveillance for approximately 19 exchanges that operate 26 stock and options markets.³⁷³ This surveillance encompasses 99.5% of U.S. stock market trading volume and about 65% of U.S. options trading activity,³⁷⁴ but it does not encompass futures markets.

³⁶⁵ See *Traders Charged in Multi-Broker Spoofing Scheme*, Trillium Management (Dec. 15, 2016), <https://www.trlm.com/traders-charged-multi-broker-spoofing-scheme/>.

³⁶⁶ Plea Agreement, *United States v. Liew*, No. 17-CR-001 (N.D. Ill. June 1, 2017), <https://www.justice.gov/criminal-fraud/file/972986/download>.

³⁶⁷ See Renato Mariotti, Thompson Coburn LLP, *Newest Criminal Spoofing Case Features Coordinated Spoofing, Front Running* (June 5, 2017), <https://www.thompsoncoburn.com/insights/publications/item/2017-06-05/newest-criminal-spoofing-case-features-coordinated-spoofing-front-running>.

³⁶⁸ Cara Mannion, *Deutsche-Linked Futures Trader Cops to Metals ‘Spoofing,’* LAW360 (June 2, 2017, 5:37 PM EDT), <https://www.law360.com/articles/930858>.

³⁶⁹ See Wolcott, *supra* note 337. This trend is consistent with more general patterns. For example, in the second quarter of 2017, 54% of FINRA’s cross-market equity alerts identified potential manipulative activity by two or more market participants acting together. Cook, *supra* note 35.

³⁷⁰ Ilan Guedj & An Wang, *An Update on Spoofing and its Challenges*, LAW360 (Mar. 16, 2016, 12:14 PM EDT), <https://www.law360.com/articles/1022562/an-update-on-spoofing-and-its-challenges>.

³⁷¹ Todd Ehret, *Impact Analysis: Latest U.S. Spoofing Cases Show Regulators’ Focus, Highlight Chat Rooms*, REUTERS.COM (June 13, 2017, 2:40 PM), <https://www.reuters.com/article/bc-finreg-regulators-chatrooms-idUSKBN194JD>.

³⁷² Stewart Bishop, *White Collar ‘Goes Dark’ with Rise of Secret Messaging Apps*, LAW360 (Sept. 20, 2017, 7:32 PM EDT), <https://www.law360.com/articles/960228/white-collar-goes-dark-with-rise-of-secret-messaging-apps>.

³⁷³ See Cook, *supra* note 35; U.S. Sec. and Exch. Comm’n, Release No. 34-79361, File No. SR-FINRA-2016-043, at 3 n.7 (Nov. 21, 2016), <https://www.sec.gov/rules/sro/finra/2016/34-79361.pdf>. See also Linda Rittenhouse, CFA Institute, *Self-Regulation in the Securities Markets: Transitions and New Possibilities* 17 (Aug. 2013), <https://www.cfainstitute.org/en/advocacy/policy-positions/self-regulation-in-the-securities-markets-transitions> (observing that numerous securities exchanges outsource market surveillance to FINRA).

³⁷⁴ Cook, *supra* note 35.

In 2016 FINRA amended its Rule 5210 to prohibit spoofing and layering³⁷⁵ when the conduct constitutes a “frequent pattern”—a term that was left undefined. No evidence of intent is required to establish a violation.³⁷⁶ That same year FINRA initiated a program wherein brokerage firms are issued cross-market equities supervision report cards designed to alert them to potential spoofing and layering activity—including multi-broker spoofing.³⁷⁷ Because the report cards are not made public and do not represent findings that violations have occurred, it is unclear what steps firms receiving troubling reports are expected to take. The efficacy of FINRA’s report card approach is doubtful.³⁷⁸

Single or multiple brokers often engage in cross-market spoofing,³⁷⁹ which is similarly difficult to expose (and prove). Futures exchanges have trouble detecting cross-market spoofing because their surveillance systems generally are limited to activity occurring on their own platforms.³⁸⁰ In September 2018 the CFTC settled with a New Jersey-based commodities trader and his former firm for \$2.3 million, in a case in which the broker spoofed the copper futures markets on both COMEX and the London Metal Exchange.³⁸¹ The investigation of this case was conducted by the CFTC’s Spoofing Task Force, and the Commission charged that the trader’s domestic spoofing violated only § 4c(a)(5) and his cross-market spoofing violated only § 6(c)(1)

³⁷⁵ See FINRA, Rule 5210, Supplementary Material .03 (Disruptive Quoting and Trading Activity Prohibited), http://finra.complinet.com/en/display/display.html?rbid=2403&element_id=8726 (last visited Mar. 15, 2019). Simultaneously, FINRA amended its Rule 9810 to provide the agency with authority to issue, on an expedited basis, a permanent cease and desist order against any FINRA member that violates Supplementary Material .03 or provides market access to a client engaged in the violative activity. See FINRA, Rule 9810, http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=4026 (last visited Mar. 15, 2019). Prior to these amendments, FINRA had pursued enforcement actions in spoofing and layering cases by alleging, *inter alia*, violations of just and equitable principles of trade (FINRA Rule 2010). The Law Surrounding Spoofing, *supra* note 143, at 11.

³⁷⁶ See David F. Freeman, Jr., *Combating Disruptive Electronic Trading: Expedited Cease and Desist Proceedings* by FINRA, PLI, BD/IA: REGULATION IN FOCUS (Nov. 23, 2016), <https://bdia.pli.edu/index.php/2016/11/23/combating-disruptive-electronic-trading-expedited-cease-and-desist-proceedings-by-finra/>.

³⁷⁷ FINRA, News Release, *FINRA Issues First Cross-Market Report Cards Covering Spoofing and Layering* (Apr. 28, 2016), <http://www.finra.org/newsroom/2016/finra-issues-first-cross-market-report-cards-covering-spoofing-and-layering>.

³⁷⁸ In 2017 FINRA announced that it had seen a 68% decline in “layering exceptions” since the initiation of its cross-market report card program. See Sarah N. Lynch, *Wall Street Regulator Detects Fewer Signals of Illegal ‘Layering,’* REUTERS (May 17, 2017, 12:15 PM), <https://www.reuters.com/article/us-wall-street-finra-manipulation-idUSKCN18D23W> (reporting decline). This statistic is of limited significance. First, it may simply indicate that layering has become increasingly more difficult to detect. See *id.* (reporting that traders may have discovered how to evade detection). Second, it is not clear that the number includes spoofing. Third, whereas spoofing and layering are more common in futures than in equities, the report card program only encompasses the latter markets because FINRA lacks jurisdiction over derivatives.

³⁷⁹ See Cook, *supra* note 35 (noting that In the second quarter of 2017, 74% of FINRA’s cross-market equity alerts identified potential manipulation by a market participant acting across multiple markets); Rachel Wolcott, *Special Report: Are U.S. Regulators Ahead of European Counterparts in Tackling Tech-Enabled Market Abuse?*, THOMSON REUTERS ACCELUS (June 22, 2017), <https://www.vedderprice.com/-/media/files/news/2017/06/thomson-reuters-accelusare-us-regulators-ahead-of.pdf?la=en> (noting that United States has seen many cases of multi-venue spoofing).

³⁸⁰ Cooper & Davis, *supra* note 32.

³⁸¹ See *In re Michael D. Franko*, CFTC Docket No. 18-35 (C.F.T.C. Sept. 19, 2018); *In re Victory Asset, Inc.*, CFTC Docket No. 18-36 (C.F.T.C. Sept. 19, 2018).

and Regulation 180.1.³⁸² It is not clear whether COMEX was able to detect this scheme. The CFTC's decision to not charge a § 4c(a)(5) violation in connection with the cross-market spoofing was correct, because that statute only prohibits spoofing conducted on or subject to the rules of a registered exchange, which the London Metal Exchange is not. But proving the § 6(c)(1) violation would have been difficult, had the case been litigated. The CFTC probably must show in a cross-market spoofing case that the foreign contract is sufficiently economically correlated to a domestic contract that a spoofing order for the former constitutes a manipulative or deceptive device or contrivance used in connection with the sale of the latter.³⁸³

B. The National Exam Analytics Tool and the Consolidated Audit Trail

The task of uncovering spoofing schemes may be eased by at least two data analytics tools. One is the SEC's National Exam Analytics Tool (NEAT), which was developed by the SEC's Quantitative Analytics Unit and unveiled in 2014. NEAT permits the SEC's examiners to access and systematically analyze large, complex trade blotters and match them against external events. Massive amounts of trading data can be analyzed in a fraction of the time it previously took³⁸⁴ and thus NEAT can be used by the SEC to detect spoofing in equity markets.³⁸⁵

The second tool is the Consolidated Audit Trail (CAT). In 2012, in the wake of the 2010 flash crash, the SEC directed FINRA, the CBOE, the New York Stock Exchange, and Nasdaq to work together to develop and operate the CAT,³⁸⁶ and in 2016 the SEC approved an implementation plan.³⁸⁷ CAT is intended to provide FINRA and the SEC with a searchable database that will allow them to accurately identify the beneficial owner of an order or trade and to follow the transaction through the entire trade lifecycle—from origination through routing, modification, cancellation, or execution—recorded on an industry-wide synchronized clock, down to milliseconds or finer increments.³⁸⁸ One major change that CAT will accomplish is universal access to market information by securities regulators. Whereas pre-CAT, FINRA and the exchanges each have access to information that the others do not, post-CAT all self-regulatory organizations (SROs) and the SEC will have access to CAT information.³⁸⁹ This will

³⁸² See Dean Seal, *NJ Trader, Firm to Pay CFTC \$2.3 Million Over Spoofing Claims*, LAW360 (Sept. 19, 2018, 7:01 PM EDT), <https://www.law360.com/articles/1084423/nj-trader-firm-to-pay-cftc-2-3m-over-spoofing-claims>.

³⁸³ Cooper & Davis, *supra* note 32.

³⁸⁴ See Bruce Carton, *SEC's 'NEAT' Tool Sifts Massive Quantities of Trade Data to Flag Insider Trading* (Jan. 28, 2014), <https://www.complianceweek.com/blogs/enforcement-action/secs-neat-tool-sifts-massive-quantities-of-trade-data-to-flag-insider/#.W62Hz9dKiUk>.

³⁸⁵ See Marc H. Axelbaum, et al., Pillsbury Winthrop Shaw Pittman LLP, Client Alert, *Spoofing is No Joke: Prosecutors Clamp Down on High-Frequency Traders* 4 (Jan. 4, 2016), <https://www.pillsburylaw.com/images/content/1/2/v2/1270/AlertJan2016LitigationSpoofingisNoJoke.pdf>. Similarly, Nasdaq uses SMARTS trade surveillance technology to detect manipulative activity, including spoofing. See Nasdaq, SMARTS Trade Surveillance, <https://business.nasdaq.com/market-tech/market-participants/Sell-Side/Surveillance> (last visited Mar. 15, 2019).

³⁸⁶ See Hayden C. Holliman, Note, *The Consolidated Audit Trail: An Overreaction to the Danger of Flash Crashes from High Frequency Trading*, 19 N.C. BANKING INST. 135, 164 (2015) (concluding that CAT manifests overreaction to flash crash).

³⁸⁷ Cook, *supra* note 35.

³⁸⁸ SIFMA, *Industry Recommendations for the Creation of a Consolidated Audit Trail (CAT)*, at 6 (Mar. 28, 2013), <https://www.sifma.org/wp-content/uploads/2017/05/industry-recommendations-for-the-creation-of-a-consolidated-audit-trail.pdf>.

³⁸⁹ Cook, *supra* note 35.

permit regulators to rapidly reconstruct trading activity and identify the parties responsible for each order.³⁹⁰

CAT's implementation has been repeatedly delayed and by mid-2018 CAT still lacked a firm launch date.³⁹¹ The repeated delays have been attributed to the SEC's decision to place the SROs—which are deeply conflicted—in charge of development, design, implementation, and maintenance.³⁹² Moreover, while CAT could help detect cross-market spoofing,³⁹³ it is not currently designed to encompass futures markets³⁹⁴ and thus will provide no access to information concerning the financial instruments that are most likely to be subject to spoofing and layering.

C. Regulation A-T

Another potential tool to combat spoofing is Regulation Automated Trading (Reg A-T). Reg A-T was first proposed by the CFTC in 2015 and is designed to update the Commission's rules on trading practices in response to the evolution from pit trading to electronic and algorithmic trading.³⁹⁵ It would require certain traders to (a) implement pre-trade risk controls reasonably designed to prevent and reduce the risk of trading activity that violate the CEA or CFTC regulations—including the spoofing prohibition, and (b) perform testing of their systems and sources reasonably designed to identify circumstances that may contribute to such violations.³⁹⁶ Reg A-T would largely codify a number of existing industry best practices,³⁹⁷ but it has encountered rough waters and substantial delay. By February 2019 it had not yet been adopted by the CFTC.

D. Industry Software

The CFTC does not mandate surveillance at the firm level³⁹⁸ but the absence of this requirement should not deter firms from monitoring their traders' conduct. The Commission has encouraged surveillance by including it as part of the undertakings in several of its recent high-profile spoofing settlements,³⁹⁹ and surveillance systems are readily available from third-party

³⁹⁰ Charles R. Korsmo, *High-Frequency Trading: A Regulatory Strategy*, 48 U. RICH. L. REV. 523, 609 (2014).

³⁹¹ Dunstan Prial, *SEC faces Calls to Push Back Harder on Audit Trail Delays*, LAW360 (May 11, 2018, 7:34 PM EDT), <https://www.law360.com/articles/1042904/sec-faces-calls-to-push-back-harder-on-audit-trail-delays>.

³⁹² *Id.*

³⁹³ Wolcott, *supra* note 337.

³⁹⁴ See Davis Polk & Wardwell LLP, *SEC Approves Consolidated Audit Trail Plan* (Dec. 20, 2016), https://www.davispolk.com/files/2016-12-20_sec_approves_consolidated_audit_trail_plan.pdf.

³⁹⁵ Rena S. Miller & Gary Shorter, *High Frequency Trading: Overview of Recent Developments*, Cong. Res. Serv. 7-5700, at 9 (Apr. 4, 2016), <https://fas.org/sgp/crs/misc/R44443.pdf>.

³⁹⁶ See Regulation of Automated Trading, Notice of Proposed Rulemaking, 80 Fed. Reg. 78,824 (Dec. 17, 2015); Regulation Automated Trading, Supplemental Notice of Proposed Rulemaking, 81 Fed. Reg. 85,334 (Nov. 25, 2016).

³⁹⁷ Sullivan & Cromwell LLP, *CFTC Proposes Rulemaking Regarding Automated Trading* (Dec. 2, 2015), <https://www.sullcrom.com/cftc-proposes-rulemaking-regarding-automated-trading>.

³⁹⁸ See Carrie E. DeLange & James G. Lundy, *7th Circuit Affirms 1st Conviction for Spoofing*, NAT'L L. REV. (Aug. 16, 2017), <https://www.natlawreview.com/article/7th-circuit-affirms-1st-conviction-spoofing> (noting that trade surveillance is “not currently a regulatory requirement”).

³⁹⁹ *Id.* For example, as part of the CFTC's spoofing settlement with Bank of Nova Scotia in September 2018, BNS was required to pay an \$800,000 civil monetary penalty and implement systems and controls reasonably designed to

vendors. For example, Vertex Analytics has created graphics software that has been used by the exchanges to detect spoofing.⁴⁰⁰ The software is able to graphically represent every order and transaction in a market, thereby making review more efficient.⁴⁰¹ Another technology consulting firm—Neurensic, Inc.—has developed a Spoofing Similarity Model that also aids in detection.⁴⁰² Some market participants have internally developed proprietary systems.⁴⁰³

IX. Constraints on the CFTC

The primary goals of the CFTC’s enforcement function are the preservation of market integrity and protection of customers from harm.⁴⁰⁴ Historically, accomplishment of these goals has been undermined by the Commission’s shoestring budget. The resource problem was exacerbated by the DFA, which substantially increased the CFTC’s authority and mandate by expanding the types of conduct and entities the Commission regulates. The markets that the CFTC oversees post-DFA are vast—comprising over \$431 trillion in notional value of futures, options, and swaps⁴⁰⁵—but the Commission has not been granted adequate resources to do an effective job.⁴⁰⁶ The CFTC’s budget remained flat during fiscal years 2015-2018—it was \$250 million during three of those years and declined by \$1 million during 2018.⁴⁰⁷ In leverage terms, each year the CFTC receives \$1 in federal funds to cover \$1.72 million worth of products.⁴⁰⁸ The CFTC is saddled with a substantially more modest budget and staff than the SEC, which regulates a much smaller securities market.⁴⁰⁹

Moreover, the CFTC—unlike virtually all other financial regulators (including the SEC)—receives none of its funding from market participants.⁴¹⁰ The CFTC has asked for years

detect spoofing activity by its traders. *See* In re Bank of Nova Scotia, CFTC Docket No. 18-50 (C.F.T.C. Sept. 28, 2018).

⁴⁰⁰ *See* Matthew Leising, *Spoofing Went Mainstream in 2015*, BLOOMBERG BUSINESS (Dec. 21, 2015, 7:00 PM EST), <https://www.bloomberg.com/news/articles/2015-12-22/nabbing-the-rogue-algo-inside-the-year-spoofing-went-mainstream>.

⁴⁰¹ *Id.* *See also* Garrett Baldwin, *Vertex’s Visualizations: Advancing Algos & Spotting Spoofers*, MODERN TRADER (Apr. 16, 2016) (describing Vertex technology).

⁴⁰² *See* Neurensic, Inc., *Spoofing Similarity Model* (Sept. 13, 2016), <http://neurensic.com/spoofing-similarity-model/>.

⁴⁰³ DeLange & Lundy, *supra* note 398. Historically, surveillance tools detected trading patterns using rule-based criteria, which, in the case of spoofing, might have taken the form of conditionals based on the directionality, size, and timing of orders. More recently, surveillance has adopted machine learning tools and technology to identify spoofing. Collin Starkweather & Izzy Nelken, *Artificial Intent: AI on the Trading Floor*, LAW360 (Jan. 23, 2019, 1:21 PM EST), <https://www.law360.com/articles/1119871/artificial-intent-ai-on-the-trading-floor>.

⁴⁰⁴ *See* 2018 Budget Request, *supra* note 53.

⁴⁰⁵ Brez, *supra* note 21.

⁴⁰⁶ *See, e.g.*, Massad 2014 Remarks, *supra* note 37 (“The CFTC’s current budget falls very short.”).

⁴⁰⁷ Testimony of CFTC Chairman J. Christopher Giancarlo before the Senate Comm. on Appropriations Subcomm. on Financial Services and General Government (June 5, 2018), <https://www.cftc.gov/PressRoom/SpeechesTestimony/opagiancarlo47>.

⁴⁰⁸ Statement by Commissioner Sharon Y. Bowen on the Commodity Futures Trading Commission’s 2018 Budget Request (May 23, 2017), <https://www.cftc.gov/PressRoom/SpeechesTestimony/bowenstatement052317>.

⁴⁰⁹ Zach Brez & Jon Daniels, *The New Financial Sheriff: CFTC Anti-Fraud Authority After Dodd-Frank*, 44 SEC. REG. & L. REP. 1209 (June 18, 2012).

⁴¹⁰ *See* John Crawford, et al., *The Volcker Alliance, Memorandum Concerning the Securities and Exchange Commission and the Commodity Futures Trading Commission* 98 (Oct. 21, 2014), https://www.volckeralliance.org/sites/default/files/attachments/Background%20Paper%203_Memorandum%20Concerning%20The%20Securities%20and%20Exchange%20Commission%20and%20The%20Commodity%20Futures%20

for user fees to fund itself, but such fees have never been provided.⁴¹¹ The absence of user fees has the advantage of reducing conflicts of interest that are inherent in most SROs, but it has the pronounced disadvantage of hampering the CFTC's ability to achieve its regulatory goals. As noted by one recent review, the "CFTC's size and perpetual underfunding has led to selective enforcement—the CFTC only prosecutes the largest and most egregious spoofing cases."⁴¹² Similarly, the CFTC is forced to settle comprehensive spoofing matters rather than proceed to costly trials.⁴¹³

The CFTC's funding problem is compounded by the fact that the Commission is technologically challenged. It lacks both access to real-time trading data from the exchanges and sufficient personnel with the capacity to analyze the data it does collect.⁴¹⁴ According to Goelman, the CFTC's former Director of Enforcement, a "massive amount of misconduct" in futures markets goes undetected because of insufficient data mining.⁴¹⁵

X. CFTC Enforcement Tools

The CFTC has available to it certain enforcement tools that may help offset its resource constraints. Those tools are discussed below.

A. The CFTC's Cooperation and Self-Reporting Program

The CFTC's anti-spoofing efforts may be enhanced by its cooperation and self-reporting program. In January 2017 the Commission's Division of Enforcement issued two Enforcement Advisories setting forth factors the Division may consider in assessing cooperation by companies and individuals in the context of CFTC enforcement proceedings.⁴¹⁶ The January 2017 CFTC Enforcement Advisories—one for companies and one for individuals—were the first update to the CFTC's corporate cooperation guidelines since 2007 and the Division's first statement of its policy specifically concerning cooperating individuals.

The January 2017 Advisories outlined four sets of factors the Division may use in evaluating a party's cooperation. They are the same for both the Companies and Individuals Advisories, with slight differences in the sub-factors. The four sets of factors are: (1) the value of the cooperation to the Division's investigation(s) or enforcement action(s); (2) the value of the cooperation in the context of the Division's broader law enforcement interests; (3) the balance of

[20Trading%20Commission.pdf](#) ("The CFTC is the only financial regulatory agency that is not at least partially self-funded.") [hereinafter Volcker Alliance].

⁴¹¹ Bowen, *supra* note 408.

⁴¹² Heinz, *supra* note 102, at 97.

⁴¹³ See, e.g., Freifeld, *supra* note 3 (noting that if the CFTC had proceeded to trial against spoofer Igor Oystacher, this would have consumed a huge chunk of the Commission's operating budget for 2017).

⁴¹⁴ Strom, *supra* note 75.

⁴¹⁵ Freifeld, *supra* note 3.

⁴¹⁶ See U.S. COMMODITY FUTURES TRADING COMM'N, ENFORCEMENT ADVISORY: COOPERATION FACTORS IN ENFORCEMENT DIVISION SANCTION RECOMMENDATIONS FOR COMPANIES 1 (Jan. 19, 2017), <http://www.cftc.gov/idx/groups/public/@lrenforcementactions/documents/legalpleading/enfadvisorycompanies011917.pdf> [hereinafter COMPANIES ADVISORY]; U.S. COMMODITY FUTURES TRADING COMM'N, ENFORCEMENT ADVISORY: COOPERATION FACTORS IN ENFORCEMENT DIVISION SANCTION RECOMMENDATIONS FOR INDIVIDUALS 1 (Jan. 19, 2017), <http://www.cftc.gov/idx/groups/public/@lrenforcementactions/documents/legalpleading/enfadvisoryindividuals011917.pdf> [hereinafter INDIVIDUALS ADVISORY].

culpability and any history of misconduct against acceptance of responsibility and mitigation or remediation, and (4) any uncooperative conduct, including actions taken to mislead, obstruct or delay the division's investigation.⁴¹⁷ The consideration of the four sets of factors in a particular matter is subject to the discretion of the CFTC enforcement attorneys handling that matter.⁴¹⁸

The January 2017 Advisories reflected the DOJ's prior Yates Memorandum, issued in September 2015 by then-DOJ Deputy Attorney General Sally Yates.⁴¹⁹ The Yates Memorandum, formally entitled "Individual Accountability for Corporate Wrongdoing," was designed to reaffirm the DOJ's commitment to hold executives and other individuals accountable for corporate misconduct.⁴²⁰ The January 2017 Advisories echoed the Yates Memorandum by emphasizing the identification of culpable individuals⁴²¹—which prior iterations of the Advisories did not—but unlike the Yates Memorandum they did not explicitly require a corporation to provide all relevant facts relating to these individuals as a prerequisite to qualify for any cooperation credit.⁴²² Instead, this was merely one factor that the CFTC might take into consideration.

The January 2017 Advisories failed to quantify the financial benefits that could result from voluntary cooperation.⁴²³ They provided "no assurance that a company providing a particular degree of cooperation will receive a particular amount of credit — or any credit — in return."⁴²⁴ This failure to provide clarity and transparency regarding the tangible benefits companies can expect to receive in exchange for cooperation threatened to limit the Advisories' effectiveness.⁴²⁵

⁴¹⁷ COMPANIES ADVISORY, *supra* note 416, at 2-7; INDIVIDUALS ADVISORY, *supra* note 416, at 2-5.

⁴¹⁸ Paul Pantano, Jr. et al., *CFTC Cooperation Advisories Prescribe High Burdens — Has the Expectation of Above-and-Beyond Cooperation Across Federal Agencies Reached Its Apex?*, WILLKIE FARR & GALLAGHER LLP, Mar. 15, 2017, at 2, http://www.willkie.com/~media/Files/Publications/2017/03/CFTC_Cooperation_Advisories_Prescribe_High_Burdens.pdf.

⁴¹⁹ Memorandum from Sally Q. Yates, Deputy Attorney Gen., U.S. Dep't of Justice, to All Component Heads and United States Attorneys (Sept. 9, 2015), <https://www.justice.gov/dag/file/769036/download>. See Gideon Mark, *The Yates Memorandum*, 51 UC DAVIS L. REV. 1589, 1592-96 (2018) (describing the origin of the Yates Memorandum).

⁴²⁰ Robert R. Stauffer & William C. Pericak, *Twenty Questions Raised by the Justice Department's Yates Memorandum*, 99 Crim. L. Rep. (BNA) 191 (May 18, 2016).

⁴²¹ See *id.*

⁴²² *CFTC Releases New Enforcement Cooperation Guidelines*, LATHAM & WATKINS: CLIENT ALERT COMMENTARY, No. 2076, Feb. 14, 2017, at 2, <https://www.lw.com/thoughtLeadership/CFTC-new-enforcement-cooperation-guidelines>.

⁴²³ *CFTC's Demanding New Cooperation Guidelines for Companies and Individuals*, CLEARY GOTTlieb, Jan. 24, 2017, at 5, <https://www.clearygottlieb.com/~media/organize-archive/cgsh/files/publication-pdfs/alert-memos/2017/alert-memo-201716.pdf>.

⁴²⁴ Robert Houck et al., *CFTC Gives Guidance on Cooperation*, CLIFFORD CHANCE (Jan. 29, 2017), https://www.cliffordchance.com/briefings/2017/01/cftc_gives_guidanceoncooperation.html.

⁴²⁵ See, e.g., David Meister et al., *Inside the CFTC's New Advisories on Cooperation*, LAW360 (Feb. 8, 2017, 11:34 AM), <https://www.law360.com/articles/889615/inside-the-cftc-s-new-advisories-on-cooperation> ("Until an entity knows with greater certainty what benefit it can expect to receive in return for self-reporting information to the CFTC, the utility and effectiveness of this new guidance will naturally be limited.").

In September 2017 the CFTC changed its approach when it issued a further updated advisory that modified but did not supplant the January 2017 Advisories.⁴²⁶ This update contemplated a multistep process of self-reporting, cooperation, and remediation. Like the Yates Memorandum, it emphasized that voluntary self-reporting is independent of cooperation and clarified that in order to obtain full credit the disclosure of all relevant facts about the individuals involved in the misconduct is required.⁴²⁷ Voluntary disclosure has become the program's most important driver, in a nod to the CFTC's limited resources.

The CFTC's Division of Enforcement has characterized its cooperation and self-reporting program as one of the "most aggressive tools we have at our disposal,"⁴²⁸ and the NPAs entered into by the Commission in the Citigroup spoofing cases discussed *supra* reflect an important extension of the program.⁴²⁹ However, to date the program does not appear to have spurred self-reporting of spoofing. Of the nine spoofing enforcement actions commenced by the CFTC in fiscal year 2017, only one involved self-reporting.⁴³⁰ One likely explanation is that the September 2017 update, like the January 2017 Advisories, failed to quantify the financial benefits that may attach to self-reporting. In extraordinary circumstances the Division of Enforcement may recommend a declination of enforcement—as where misconduct is pervasive across an industry and the company or individual is the first to self-report⁴³¹—but otherwise there is no blueprint for calculating benefits.⁴³²

While self-reporting has been limited, the program has generated cooperation in numerous recent spoofing cases. The eight spoofing enforcement actions that the CFTC

⁴²⁶ See U.S. COMMODITY FUTURES TRADING COMM'N, ENFORCEMENT ADVISORY: UPDATED ADVISORY ON SELF REPORTING AND FULL COOPERATION 2-3 (Sept. 25, 2017), <http://www.cftc.gov/idx/groups/public/@lrenforcementactions/documents/legalpleading/enfadvisoryselfreporting0917.pdf> [hereinafter UPDATED ADVISORY].

⁴²⁷ See *id.* In November 2018 the DOJ relaxed the requirement of the Yates Memorandum that in order for a company to be eligible for any credit for cooperation all relevant facts about the individuals involved in the company's misconduct must be provided. Now, in order to be eligible for cooperation credit in a criminal case, a company must identify every individual who was substantially involved in or responsible for the criminal conduct. In order to be eligible for credit in a civil case, a company must identify all wrongdoing by senior officials, including members of senior management or the board of directors. See U.S. Dep't of Justice, Justice News, *Deputy Attorney General Rod J. Rosenstein Delivers Remarks at the American Conference Institute's 35th International Conference on the Foreign Corrupt Practices Act* (Nov. 29, 2018), <https://www.justice.gov/opa/speech/deputy-attorney-general-rod-j-rosenstein-delivers-remarks-american-conference-institute-0>. These changes will likely make it easier for companies to obtain cooperation credit. John Nowak, *A Welcome DOJ Shift on Cooperation Credit*, LAW360 (Dec. 4, 2018, 1:10 PM EST), <https://www.law360.com/banking/articles/1107289/a-welcome-doj-shift-on-cooperation-credit>. By February 2019 the CFTC had not yet amended its Advisories to conform to this revision of the Yates Memorandum.

⁴²⁸ U.S. Commodity Futures Trading Comm'n, *2018 Annual Report on the Division of Enforcement* 4 (Nov. 2018), https://www.cftc.gov/sites/default/files/2018-11/ENFAnnualReport111418_0.pdf.

⁴²⁹ See Covington & Burling LLP, *CFTC Enforcement and Regulatory Report: 2017 Activity and Outlook* 4 (Aug. 28, 2017), <https://www.cov.com/en/news-and-insights/insights/2017/08/cftc-enforcement-and-regulatory-report-2017-activity-and-outlook>.

⁴³⁰ See Brez, Lullo & Sedano, *supra* note 91.

⁴³¹ See UPDATED ADVISORY, *supra* note 426, at 3.

⁴³² Paul J. Pantano, Jr. et al., *CFTC Enforcement Division Dangles Self-Reporting Carrot: Is It Worth Taking a Bite?*, WILLKIE FARR & GALLAGHER LLP: CLIENT ALERT, Sept. 28, 2017, at 1-2, [http://www.willkie.com/~media/Files/Publications/2017/09/CFTC Enforcement Division Dangles SelfReporting Carrot Is it worth taking a bite.pdf](http://www.willkie.com/~media/Files/Publications/2017/09/CFTC%20Enforcement%20Division%20Dangles%20SelfReporting%20Carrot%20Is%20it%20worth%20taking%20a%20bite.pdf).

announced in January 2018 stemmed from the Commission's cooperation program.⁴³³ More recently, in September 2018 Chicago-based Geneva Trading USA LLC agreed to pay a civil penalty of \$1.5 million to resolve allegations that three of its traders spoofed on the CME from 2013 to 2016.⁴³⁴ This penalty reflected a discount that Geneva received in light of its cooperation, its early resolution of the matter, and the remedial steps it undertook.⁴³⁵ Similarly, in September 2018 Mizuho Bank agreed to pay a civil penalty of \$250,000 to resolve allegations that it engaged in multiple acts of spoofing on the CME and CBOT. This penalty reflected a significant reduction that Mizuho received in light of its cooperation and remediation.⁴³⁶ And earlier, in August 2017, Bank of Tokyo Mitsubishi-UFJ agreed to pay a civil penalty of \$600,000 to resolve allegations that one of its traders spoofed on the CME and CBOT during the period 2009 to 2014.⁴³⁷ This modest penalty reflected a substantial discount pegged to the bank's extensive efforts to self-report, cooperate, and remediate.⁴³⁸

The CFTC could enhance its cooperation program by more frequently bifurcating cases between liability and penalty stages. An example of bifurcation occurred in October 2018 in the CFTC's enforcement action against spoofer Kamaldeep Gandhi. In that case, Gandhi entered into a cooperation agreement with the Enforcement Division, pursuant to which he admitted to his own conduct and provided evidence concerning other traders who were involved in the spoofing scheme.⁴³⁹ The agreement bound Gandhi to provide continued cooperation during the course of the CFTC's broader investigation and the amount of his penalty was reserved for determination once his cooperation was completed.⁴⁴⁰ This bifurcation mirrored the general practice in criminal cases, where sentencing occurs sometime after a guilty plea is entered. Expanded use of such a practice by the CFTC could enhance its enforcement efforts.

One caveat is that the CFTC's cooperation program may backfire against the government in the rare instances when cases are tried. Recall that Flotron was acquitted in April 2018 by a Connecticut federal jury in the second spoofing case to advance to trial. While it is unclear why the jury acquitted, one pillar of the defense trial strategy was to vigorously attack prosecution witnesses who had struck cooperation deals with the CFTC.⁴⁴¹ This pillar was not unique. Evidence obtained from immunized or co-conspirator witnesses is almost always subject to

⁴³³ McDonald Statement, *supra* note 40.

⁴³⁴ See *In re Geneva Trading USA, LLC*, CFTC Docket No. 18-37 (C.F.T.C. Sept. 20, 2018); Dean Seal, *Chicago-based Trading Co. to Pay \$1.5 Million Over 'Spoofing' Claims*, LAW360 (Sept. 20, 2018, 4:54 PM EDT), <https://www.law360.com/articles/1084699/chicago-based-trading-co-to-pay-1-5m-over-spoofing-claims>.

⁴³⁵ *In re Geneva Trading USA, LLC*, CFTC Docket No. 18-37, at 3 (C.F.T.C. Sept. 20, 2018).

⁴³⁶ U.S. Commodity Futures Trading Comm'n, Press Release No. 7800-18, *CFTC Finds Mizuho Bank, Ltd. Engaged in Spoofing of Treasury Futures and Eurodollar Futures* (Sept. 21, 2018), <https://www.cftc.gov/PressRoom/PressReleases/7800-18>.

⁴³⁷ See Skadden, Arps, Slate, Meager & Flom LLP, *CFTC Case Updates: Settlement Highlights Agency's New Premium on Cooperation; 7th Circuit Upholds Criminal Spoofing Conviction* (Aug. 15, 2017), <https://www.skadden.com/insights/publications/2017/08/cftc-case-updates-settlement-highlights>.

⁴³⁸ See *In re Bank of Tokyo Mitsubishi-UFJ, Ltd.*, CFTC Docket No. 17-21, at 3 (C.F.T.C. Aug. 7, 2017).

⁴³⁹ See *In re Kamaldeep Gandhi*, CFTC Docket No. 19-301, at 2-5 (C.F.T.C. Oct. 11, 2018).

⁴⁴⁰ *Id.* at 8-10.

⁴⁴¹ See Mary P. Hansen & James G. Lundy, *The Government Suffers a Spoofing Setback*, NAT'L L. REV. (Apr. 27, 2018), <https://www.natlawreview.com/article/government-suffers-spoofing-setback>.

intense cross-examination at trial.⁴⁴² A second caveat is that cooperation with the CFTC may backfire against defendants. Recall that Coscia settled with the CFTC prior to his criminal trial. This deal failed to prevent criminal prosecution and Coscia's participation in the CFTC's pre-settlement investigation provided the DOJ with ammunition that later resulted in his criminal conviction. When the Seventh Circuit affirmed Coscia's conviction one of the items it cited for evidence of his intent to cancel orders prior to execution was his deposition, taken by the CFTC.⁴⁴³

B. The CFTC's Whistleblower Program

The CFTC's low-profile whistleblower program also may help the Commission advance its spoofing and layering enforcement agenda. The program was established in 2010 after the DFA amended the CEA by adding § 23 (Commodity Whistleblower Incentives and Protection).⁴⁴⁴ Section 23 established a program pursuant to which the CFTC will pay awards—based on collected monetary sanctions—to eligible whistleblowers who voluntarily provide the Commission with original information about CEA violations that lead either to a covered judicial or administrative action (those resulting in monetary sanctions exceeding \$1 million) or a related action.⁴⁴⁵ The CFTC enhanced the program in 2017 when it prohibited employers from retaliating against whistleblowers and taking steps that would impede would-be whistleblowers from communicating with the CFTC about potential misconduct.⁴⁴⁶ The 2017 amendments also enhanced the awards claim review process and clarified when a whistleblower may receive an award in both the CFTC's action and in a related action.⁴⁴⁷

The 2017 program enhancements may be having a salutary effect. In fiscal year 2018 the CFTC received more whistleblower tips and complaints (760) than it had received in any prior year.⁴⁴⁸ The 2018 total represents a 63% increase over the number of tips and complaints received in 2017,⁴⁴⁹ and it includes tips concerning spoofing and market manipulation.⁴⁵⁰ Likewise, in 2018 the CFTC issued more whistleblower awards (five) and paid more money (approximately \$75 million) than it had in all prior years combined.⁴⁵¹ The 2018 totals included

⁴⁴² Rachel Cannon & Kristina Liu, *Why the CFTC's New Use of NPAs is Significant*, LAW360 (July 31, 2017, 10:51 AM EDT), <https://www.law360.com/articles/949009/why-the-cftc-s-new-use-of-npas-is-significant>.

⁴⁴³ 866 F.3d at 790.

⁴⁴⁴ 7 U.S.C. § 26 (2018).

⁴⁴⁵ *Id.* See also Lisa J. Banks, *The CFTC Whistleblower Practice Guide* 1-5 (2017), <https://www.kmblegal.com/sites/default/files/cftc-whistleblower-practice-guide-2017.pdf> (describing mechanics of the program).

⁴⁴⁶ See 17 C.F.R. §§ 165.19-20 (2018); Gideon Mark, *Confidential Witness Interviews in Securities Litigation*, 96 N.C. L. REV. 789, 802 (2018) (describing enhancements to CFTC whistleblower program).

⁴⁴⁷ See 17 C.F.R. §§ 165.7 (f-l), 165.11(a) (2018).

⁴⁴⁸ U.S. Commodity Futures Trading Comm'n, *2018 Annual Report on the Whistleblower Program and Customer Education Initiatives* 4 (Oct. 2018), <https://whistleblower.gov/sites/whistleblower/files/2018-10/FY18%20Annual%20Report%20to%20Congress%20Final.pdf> [hereinafter 2018 Annual Report].

⁴⁴⁹ *Id.*

⁴⁵⁰ *Id.* at 5.

⁴⁵¹ U.S. Commodity Futures Trading Comm'n, *2018 Annual Report on the Division of Enforcement* 14 (Nov. 2018), https://www.cftc.gov/sites/default/files/2018-11/ENFAnnualReport111418_0.pdf. By comparison, in fiscal year 2018 the SEC awarded more than \$168 million to 13 individuals under its whistleblower program, which also was established pursuant to the DFA. Since the SEC commenced its whistleblower program in 2010 it has awarded more than \$326 million to 59 individuals. U.S. Securities and Exchange Comm'n, *2018 Annual Report to Congress*

both the program's largest award (approximately \$30 million) and its first award to a foreign whistleblower.⁴⁵²

The foregoing developments suggest that the CFTC's whistleblower program may help compensate for the Commission's resource constraints,⁴⁵³ and in 2018 the CFTC described the program as "an integral component" in its enforcement arsenal.⁴⁵⁴ Indeed, whistleblowers were instrumental in the initiation of the CFTC's enforcement actions against spoofers Sarao in 2015 and Igor Oystacher in 2016.⁴⁵⁵ However, the process for granting awards remains slow and cumbersome,⁴⁵⁶ and these impediments may constrain further development of the program. Another constraint may be unresolved concerns about how the whistleblower program dovetails with the CFTC's cooperation program.⁴⁵⁷

XI. The Role of SROs in Regulating Spoofing and Layering

As indicated above, the CFTC is constrained in its anti-spoofing efforts, primarily by its limited budget. These resource constraints are only partially offset by the Commission's cooperation and whistleblowing tools. This suggests the question of whether SROs can bridge the regulatory gap. The issue is explored below.

A. The Current Multi-Tiered System of Regulation

In the United States, regulation of the futures and equities markets is characterized by a multi-tiered approach that is heavily reliant on SROs.⁴⁵⁸ Self-regulation differs from pure private ordering in that the former, unlike the latter, entails government agencies such as the CFTC and SEC imposing formalities for the adoption or amendment of rules, policies, and procedures.

SROs have responsibility for much of the day-to-day oversight of the futures and securities markets in this country.⁴⁵⁹ SROs in both markets include exchanges and associations. On the futures side, the exchanges are boards of trade registered as designated contract markets

on the Whistleblower Program 1 (Nov. 15, 2018), <https://www.sec.gov/files/sec-2018-annual-report-whistleblower-program.pdf>.

⁴⁵² 2018 Annual Report, *supra* note 448, at 3.

⁴⁵³ See Meric Sar, *Dodd-Frank and the Spoofing Prohibition in Commodities Markets*, 22 FORDHAM J. CORP. & FIN. L. 383, 410-11 (2017) (arguing that CFTC whistleblower program "may reduce informational asymmetries").

⁴⁵⁴ See CFTC, *CFTC Announces its Largest Ever Whistleblower Award of Approximately \$35 Million*, Press Release No. 7753-18 (July 12, 2018), <https://www.cftc.gov/PressRoom/PressReleases/7753-18>.

⁴⁵⁵ Phillips & Cohen, *Hedge Fund Plays an Unusual Role in CFTC Whistleblower Spoofing Case* (May 10, 2016), <https://www.phillipsandcohen.com/hedge-fund-plays-unusual-role-cftc-whistleblower-spoofing-case/>.

⁴⁵⁶ See, e.g., Erika Kelton, *CFTC Whistleblower Program Gains Momentum with Awards Totaling \$75 Million*, FORBES.COM (Aug. 27, 2018, 4:15 PM), <https://www.forbes.com/sites/erikakelton/2018/08/27/cftc-whistleblower-program-gains-momentum-with-awards-totaling-75-million/#510e5fea68b9> ("The process for making whistleblower awards is far too slow.").

⁴⁵⁷ See Paul M. Architzel, et al., *Developments in CFTC Cooperation Program*, 38 FUT. & DERIV. L. REP. (2018) (discussing intersection of the two programs).

⁴⁵⁸ See, e.g., Scopino, *supra* note 341, at 240 ("Self-regulation is the hallmark of the U.S. futures industry.").

⁴⁵⁹ See Samuel D. Posnick, Note, *A Merry-Go-Round of Metal and Manipulation: Toward a New Framework of Commodity Exchange Self-Regulation*, 100 MINN. L. REV. 441, 461 (2015) ("Notwithstanding its oversight responsibilities, the CFTC has generally deferred to commodity exchange self-regulation."); United States Gov't Accountability Office, GAO-12-625, *Securities Regulation: Opportunities Exist to Improve SEC's Oversight of the Financial Industry Regulatory Authority* 1 (May 2012), <https://www.gao.gov/assets/600/591222.pdf> (noting that SROs exercise day-to-day oversight of securities markets).

(DCMs). Futures contracts can be traded in the United States only on exchanges approved by the CFTC as DCMs.⁴⁶⁰ Self-regulation in the futures markets primarily occurs under the umbrella of CME Group, Inc., a publicly traded entity that operates four SROs and DCMs—CME, CBOT, New York Mercantile Exchange, Inc. (NYMEX), and NYMEX’s subsidiary COMEX (collectively, the Exchanges).⁴⁶¹ CME Group’s electronic trading system for its DCMs is CME Globex. Trading on this platform—where the vast majority of trading on the Exchanges occurs—is anonymous.⁴⁶² Globex traders are able to enter, modify, and cancel bids and offers in milliseconds through a portal to the Globex platform.

The foregoing arrangement is controversial. When the New York Stock Exchange became a publicly traded for-profit entity in 2006, it was required to spin-off its SRO functions to FINRA’s predecessor.⁴⁶³ No similar requirement has ever been imposed on the for-profit CME Group, which annually handles approximately three billion contracts worth \$1 quadrillion.⁴⁶⁴

The CFTC exercises oversight authority over all of the Exchanges, which police their own markets. Indeed, the status of the Exchanges as DCMs imposes a duty on them to self-regulate.⁴⁶⁵ The CFTC also exercises oversight over the association governing the futures industry—the National Futures Association (NFA). The nationwide and industry-sponsored NFA, established in 1982, is the over-arching SRO for the industry.⁴⁶⁶ Membership is mandatory for all entities conducting business on futures exchanges in the United States.⁴⁶⁷ The NFA has been described as the CFTC’s “first-line regulator.”⁴⁶⁸ However, the NFA can only exercise authority over its members, whereas the CFTC has authority over persons that trade or influence the trading of derivatives contracts, regardless of their CFTC registration status.⁴⁶⁹ The NFA is the futures counterpart to FINRA and mirrors it in structure and function.⁴⁷⁰ FINRA, overseen

⁴⁶⁰ U.S. Futures Exchange, LLC v. Board of Trade of City of Chicago, No. 04 C 6756, 2018 WL 5717983, at *1 (N.D. Ill. Oct. 31, 2018).

⁴⁶¹ See U.S. Commodity Futures Trading Comm’n, Press Release No. 7171-15, *CFTC Charges United Arab Emirates Residents Heet Khara and Nasim Salim with Spoofing in the Gold and Silver Futures Markets* (May 5, 2015), <https://www.cftc.gov/PressRoom/PressReleases/pr7171-15> (explaining the structure of CME Group).

⁴⁶² CME Group, *A Trader’s Guide to Futures: Thought Leadership with a Global Perspective* 11 (2013), <https://www.cmegroup.com/education/files/a-traders-guide-to-futures.pdf> (“Trading is open, fair, and anonymous.”). Anonymity presents an obstacle to plaintiffs who seek to pursue private actions under the CEA. Identification of the trading firms responsible for spoofing or layering in futures markets can only be made by the relevant SRO (or the CFTC using SRO data), and thus identification by plaintiffs may require judicial intervention. See, e.g., HTG Capital Partners, LLC v. Does, No. 15 C 02129, 2016 WL 612861 (N.D. Ill. Feb. 16, 2016).

⁴⁶³ Volcker Alliance, *supra* note 409, at 95.

⁴⁶⁴ See Jessica Corso, *How Chicago Became the Center of a Spoofing Test Case*, LAW360 (July 21, 2016, 9:15 PM EDT), <https://www.law360.com/articles/819235/how-chicago-became-the-center-of-a-spoofing-test-case>.

⁴⁶⁵ See Volcker Alliance, *supra* note 409, at 95.

⁴⁶⁶ See *Nicholas v. Sand Stone & Co., LLC*, 224 F.3d 179, 181 n.6 (2d Cir. 2000) (noting that NFA “functions as the futures industry’s self-regulatory organization”); *Troyer v. Nat’l Futures Ass’n*, 290 F. Supp. 3d 874, 881 (N.D. Ind. 2018) (same), and noting that NFA “operates under the oversight of the CFTC”).

⁴⁶⁷ *CFTC v. Levy*, 541 F.3d 1102, 1104 n.4 (11th Cir. 2008).

⁴⁶⁸ Volcker Alliance, *supra* note 409, at 94.

⁴⁶⁹ Brian Daly & Jacob Preiserowicz, *A New Normal in Commodity Derivatives Enforcement Actions*, LAW360 (Oct. 3, 2018, 4:35 PM EDT), <https://www.law360.com/articles/1089133/a-new-normal-in-commodity-derivatives-enforcement-actions>.

⁴⁷⁰ Derek Fischer, Note, *Dodd-Frank’s Failure to Address CFTC Oversight of Self-Regulatory Organization Rulemaking*, 115 COLUM. L. REV. 69, 96 (2015).

by the SEC,⁴⁷¹ regulates the securities industry by requiring registration of broker-dealers and subjecting FINRA members to the organization's rules, examinations, and enforcement authority.⁴⁷²

There is widespread agreement that the regulation of financial services exhibits a high degree of industry capture,⁴⁷³ as a function of multiple factors. Both FINRA and the NFA are funded exclusively by their members, in the form of membership dues and/or assessment fees.⁴⁷⁴ They are further subject to capture because their governance structures include numerous industry representatives. Ten of the 24 seats on FINRA's Board of Governors are designated for industry members,⁴⁷⁵ the public representatives often include former high-level industry executives,⁴⁷⁶ and the securities industry indirectly selects the investor representatives who serve as public members of the board.⁴⁷⁷ Similarly, pursuant to the NFA's Articles of Incorporation, the composition of its Board of Directors is weighted heavily in favor of non-public industry members⁴⁷⁸ and various public representatives on the board have been closely affiliated with industry groups.⁴⁷⁹

The result of industry capture is that SROs manifest an inherent conflict between their regulatory functions and the interests of their financially supportive members and shareholders. The conflict has been widely observed⁴⁸⁰—even by the SEC.⁴⁸¹ In order to remain viable SROs must attract order flows. This requirement renders them less inclined—perhaps significantly less inclined—to vigorously enforce rules against their constituents.⁴⁸² The absence of vigorous enforcement is explored below.

⁴⁷¹ See 15 U.S.C. § 78o-3 (2018) (outlining requirements for SEC oversight of registered securities associations).

⁴⁷² Fischer, *supra* note 470, at 77.

⁴⁷³ See, e.g., Benjamin P. Edwards, *The Dark Side of Self-Regulation*, 85 U. CIN. L. REV. 573, 606 (2017); Yesha Yadav, *The Failure of Liability in Modern Markets*, 102 VA. L. REV. 1031, 1091 (2016) (observing that dual roles of exchanges as overseers of traders and institutions dependent on traders for profit and prestige “stand in profound tension”).

⁴⁷⁴ Linda Rittenhouse, CFA Institute, *Self-Regulation in the Securities Markets: Transitions and New Possibilities* 17, 21 (Aug. 2013), <https://www.cfainstitute.org/en/advocacy/policy-positions/self-regulation-in-the-securities-markets-transitions>.

⁴⁷⁵ See Financial Industry Regulatory Authority, About, Governance, Board of Governors, <https://www.finra.org/about/finra-board-governors> (last visited Mar. 15, 2019).

⁴⁷⁶ Edwards, *supra* note 473, at 587, 589.

⁴⁷⁷ *Id.* at 614-15.

⁴⁷⁸ See National Futures Association, Articles of Incorporation, Art. VII (Board of Directors), <https://www.finra.org/about/finra-board-governors> (last visited Mar. 15, 2019).

⁴⁷⁹ Angela Canterbury & Michael Smallberg, Project on Government Oversight, Letter to Sen. Debbie Stabenow, et al., at 2 (July 23, 2012), <http://www.pogoarchives.org/m/fo/nfa-letter-20120723.pdf>.

⁴⁸⁰ See, e.g., *id.* at 1 (“Groups such as NFA are inherently conflicted because they are funded by the firms they oversee.”); Fischer, *supra* note 470, at 81 (“At a general level, delegation to self-regulators implicates a double agency problem: The Interests of the SROs do not always line up with the interests of the government regulator and, by extension, the interests of the public.”).

⁴⁸¹ U.S. Securities and Exchange Comm’n, Press Release No. 2013-107, *SEC Charges CBOE for Regulatory Failures* (June 11, 2017), <https://www.sec.gov/news/press-release/2013-2013-107htm> (remarking that SROs “must sufficiently manage an inherent conflict that exists between self-regulatory obligations and the business interests of an SRO and its members”).

⁴⁸² See Luis A. Aguilar (former Commissioner, SEC), *The Need for Robust SEC Oversight of SROs* (May 8, 2013), <https://www.sec.gov/news/public-statement/2013-spch050813laahtm>; Edwards, *supra* note 473, at 608 (observing

B. The Exchanges Adopt Express Anti-Spoofing Rules

In August 2014—four years after the enactment of the DFA—the Exchanges announced the adoption of new Rule 575 (Disruptive Practices Prohibited), effective in September 2014.⁴⁸³ Concurrent with the adoption of Rule 575 the Exchanges adopted CME Group Market Regulation Advisory Notice RA1405-5, which set forth the text of new Rule 575 and provided additional guidance on types of prohibited disruptive order entry and trading practices which the Exchanges deemed to be abusive to the orderly conduct of trading or the fair execution of transactions.⁴⁸⁴ Notice RA1405-5 specified that new Rule 575 prohibits, *inter alia*, the type of activity identified by the CFTC as spoofing,⁴⁸⁵ and the rule largely tracks the provisions of the amended CEA. However, the CME Group—unlike the CFTC with respect to § 4c(a)(5)(C)—regards recklessness as a sufficient level of scienter to constitute a spoofing violation,⁴⁸⁶ and the CME appears to have adopted a “very expansive concept of recklessness.”⁴⁸⁷ The adoption of Rule 575 marked the first time the Exchanges expressly banned spoofing, although their existing catch-all Rule 432 (General Offenses) already encompassed the conduct without identifying it by name.⁴⁸⁸ Rule 432 was amended in 2017 to more closely track the CFTC’s Rule 180.1.⁴⁸⁹

Notice RA1405-5 also addressed iceberg orders. It specified that the use of such orders does not constitute an automatic violation of Rule 575,⁴⁹⁰ but a violation may result if an iceberg order is placed as part of a scheme to mislead other market participants. An example is where “a market participant pre-positions an iceberg on the bid and then layers larger quantities on the offer to create artificial downward pressure that results in the iceberg being filled.”⁴⁹¹ Notice RA1405-5 has been superseded twice since its issuance, most recently in June 2018 when the

that SROs may be “particularly lethargic” enforcers in situations where actions in the public’s interest would undercut private profits).

⁴⁸³ See Letter from Christopher Bowen (Managing Director and Chief Regulatory Counsel, CME Group) to Christopher J. Kirkpatrick (Office of the Secretariat, CFTC), Aug. 28, 2014, <https://www.scribd.com/document/239096461/Cme-Rule-575>.

⁴⁸⁴ *Id.* at Exhibit B.

⁴⁸⁵ *Id.* at 4 (“Rule 575 prohibits the type of activity identified by the [CFTC] as ‘spoofing,’ including submitting or cancelling multiple bids or offers to create a misleading appearance of market depth or cancelling bids or offers with intent to create artificial price movements upwards or downwards.”).

⁴⁸⁶ Overdahl & Park, *supra* note 69, at 9.

⁴⁸⁷ Clifford C. Histed, *A Look at the 1st Criminal ‘Spoofing’ Prosecution: Part 2*, LAW360 (Apr. 21, 2015, 10:05 AM ET), <https://www.law360.com/articles/645567/a-look-at-the-1st-criminal-spoofing-prosecution-part-2>.

⁴⁸⁸ See Kara Scannell & Nicole Bullock, *CME Faces Scrutiny Over Warning Signs on ‘Flash Crash Trader,’* FINANCIAL TIMES (Apr. 23, 2015), <https://www.ft.com/content/47959da4-e9c0-11e4-b863-00144feab7de> (reporting that, in the three years before Rule 575 was adopted, CME exchanges brought more than 40 disciplinary actions under Rule 432 for spoofing, misleading, or intentionally/recklessly disruptive trading); Scopino, *supra* note 92, at 1096 (noting that CME has sanctioned traders for spoofing-type conduct at least since 2002).

⁴⁸⁹ See CME Group, Special Executive Report, S-7844, Amendments to CME/CBOT/NYMEX/COMEX/CME SEF Rule 432 (General Offenses) (Feb. 3, 2017), <https://www.cmegroup.com/content/dam/cmegroup/notices/market-regulation/2017/02/SER-7844.pdf> (“The additional language more closely tracks the prohibitions set forth in CFTC Regulation 180.1. . .”).

⁴⁹⁰ See Bowen, *supra* note 483, Exhibit B, at 8.

⁴⁹¹ *Id.*

Exchanges adopted CME Group RA1807-5.⁴⁹² Neither revision modified the parameters of Rule 575 or the foregoing approach to iceberg orders.

In December 2014 ICE announced the adoption of new Rule 4.02(l) to consolidate its rules prohibiting disruptive trading and providing additional clarification concerning types of prohibited activity.⁴⁹³ ICE owns 23 exchanges globally and is the third-largest exchange group in the world, behind CME Group and Hong Kong Exchanges and Clearing Ltd.⁴⁹⁴ The new rule, which became effective in January 2015, does not address spoofing by name. It generally tracks Rule 575 previously adopted by the Exchanges, but there are some differences which are revealed by comparing the guidance provided in RA1405-5 with analogous guidance provided by a Frequently Asked Questions issued by ICE and updated in August 2017. One key difference concerns their respective approaches to finding intent. Pursuant to Rule 575 and RA1405-5, “[w]here the conduct was such that it more likely than not was intended to produce a prohibited disruptive consequence without justification, intent may be found.”⁴⁹⁵ The CME does not specify what justification warrants disruption. In contrast, ICE Rule 4.02(l) omits the “without justification” language.⁴⁹⁶ Omission of this safe harbor probably makes proof of intent easier to establish in ICE enforcement actions.

C. Enforcement by the NFA and the Exchanges

CME Group spends approximately \$45 million annually to police traders,⁴⁹⁷ and among all stakeholders it is best-positioned technologically to detect spoofing in futures markets.⁴⁹⁸ Nevertheless, its lax enforcement has been noted by many critics, including the CFTC,⁴⁹⁹ which relies on the CME Group’s enforcement activity to supplement its own.⁵⁰⁰ A major example of CME Group’s enforcement failure involves Sarao, the spoofing trader charged with contributing to the 2010 flash crash. CME identified a high volume of cancelled orders by Sarao as early as 2009—one year prior to the crash—but permitted his spoofing to continue at least until April 2014 without referring him to the CFTC.⁵⁰¹ CME’s persistent failure to discipline Sarao has been

⁴⁹² See Market Regulation Advisory Notice, CME Group RA1807-5 (June 26, 2018), <https://www.cmegroup.com/rulebook/files/cme-group-Rule-575.pdf>.

⁴⁹³ See ICE Futures U.S., Exchange Notice, Disruptive Trading Practices (Dec. 29, 2014), https://www.theice.com/publicdocs/futures_us/exchange_notices/IFUS_Disruptive_Practices_Notice.pdf.

⁴⁹⁴ Investopedia, Intercontinental Exchange—ICE, <https://www.investopedia.com/terms/i/intercontinentalexchange.asp> (last visited Mar. 15, 2019).

⁴⁹⁵ See Bowen, *supra* note 483.

⁴⁹⁶ See ICE Futures U.S., Exchange Notice, Disruptive Trading Practices FAQs, Q&A 11 (Aug. 2017), https://www.theice.com/publicdocs/futures_us/Futures_US_Disruptive_Practice_FAQ.pdf; Douglas Cahanin & Zachary Ziliak, *Take Two on Disruptive Trading Rules: Comparing CME Rule 575 and ICE Rule 4.02*, DERIVATIVES LAW BLOG (Dec. 31, 2014), <http://derivativeslawblog.blogspot.com/2014/12/take-two-on-disruptive-trading-rules.html>.

⁴⁹⁷ Matthew Leising, *Spoofing*, BLOOMBERG.COM (Jan. 19, 2017, 1:01 PM EST), <https://www.bloomberg.com/quicktake/spoofing>.

⁴⁹⁸ Roy Strom, *To Catch a Spoofers*, CHICAGO LAWYER (Apr. 1, 2016), <https://www.chicagolawyer.com/elements/pages/print.aspx?printpath=/Archives/2016/04/spoofing-April16&classname=tera.gn3article>.

⁴⁹⁹ Leising, *supra* note 497.

⁵⁰⁰ *Id.* See, e.g., In re Lansing Trade Group, LLC, CFTC Docket No. 18-16, 2018 WL 3387517 (July 12, 2018) (imposing sanctions for manipulative schemes in agricultural market following joint investigation by CFTC and CME Group).

⁵⁰¹ See Scannell & Bullock, *supra* note 488.

linked to the conflict of interest inherent in SROs.⁵⁰² In a second example, in November 2015 CBOT fined a trader who violated Rule 432 by repeatedly spoofing soybean futures during a four-month period in 2012 a mere \$40,000 and suspended him from trading on CME platforms for only 20 business days.⁵⁰³ In a third example, in December 2017 CME Group fined an E-mini S&P 500 futures trader who violated Rule 575 by repeatedly spoofing between September 2014 and January 2015 a mere \$35,000 and suspended him from trading on CME platforms for only 25 days.⁵⁰⁴

Those examples are not isolated. Rather, they are consistent with the Exchanges' overall casual enforcement. In November 2017 the CFTC's Division of Market Oversight issued a report summarizing its rule enforcement review of the disciplinary programs of CBOT, CME, COMEX, and NYMEX. The review included 85 cases closed during the period July 15, 2015 to July 15, 2016. Those 85 cases resulted in suspensions as short as ten days and permanent bars on membership against a mere ten respondents.⁵⁰⁵ The 85 closed cases also produced 80 fines, which averaged less than \$54,000 and ranged as low as \$5,000.⁵⁰⁶ A review conducted by the CFTC's Division of Market Oversight three years earlier and released in November 2014 produced similar results. The 93 closed cases resulted in suspensions as short as five days, permanent membership bars against a mere ten respondents, and fines that averaged less than \$68,000 and ranged as low as \$5,000.⁵⁰⁷ A companion market surveillance rule enforcement review released by the CFTC in November 2014 concluded that NYMEX and COMEX were doing a poor job of detecting spoofing. The report noted that surveillance by NYMEX and COMEX during the review period did not result in the initiation of any spoofing cases. A number of cases were commenced, but almost all of them stemmed from complaints or tips submitted by trading firms.⁵⁰⁸

The foregoing fines are even less significant when compared with the sanctioning authority available to the Exchanges. During the review periods covered by the CFTC reports the

⁵⁰² See *id.* (noting CME's failure to discipline Sarao and stating that "[t]he conflict of interest at SROs has long been in focus").

⁵⁰³ See Notice of Disciplinary Action, CBOT 12-8862-BC (Nov. 6, 2015), <https://www.cmegroup.com/tools-information/lookups/advisories/disciplinary/CBOT-12-8862-BC-MATTHEW-GARNER.html#pageNumber=1>.

⁵⁰⁴ See Notice of Disciplinary Action, CME-15-0078-CD (Dec. 21, 2017), <https://www.cmegroup.com/notices/disciplinary/2017/12/cme-15-0078-bc-dan-ostroff0.html#pageNumber=1>; Michael Volpe, *CME Disciplinary Action Raises Eyebrows*, THE INDUSTRY SPREAD (Dec. 27, 2017), <https://theindustryspread.com/cme-disciplinary-action-raises-eyebrows/>.

⁵⁰⁵ U.S. Commodity Futures Trading Comm'n, Div. of Market Oversight, Disciplinary Program Rule Enforcement Review of CBOT, CME, COMEX, and NYMEX, at 6 (Nov. 30, 2017), <https://www.cftc.gov/sites/default/files/ido/groups/public/@iodcms/documents/file/ercme-group-disciplinary113017.pdf>.

⁵⁰⁶ *Id.*

⁵⁰⁷ U.S. Commodity Futures Trading Comm'n, Div. of Market Oversight, Disciplinary Program Rule Enforcement Review of CBOT, CME, COMEX, and NYMEX, at 4 (Nov. 21, 2014), <https://www.cftc.gov/sites/default/files/ido/groups/public/@iodcms/documents/file/er-disciplinary-program112114.pdf>.

⁵⁰⁸ See U.S. Commodity Futures Trading Comm'n, Div. of Market Oversight, Trade Practice Rule Enforcement Review: The New York Mercantile Exchange and The Commodity Exchange, at 7 (Nov. 21, 2014), <https://www.cftc.gov/sites/default/files/ido/groups/public/@iodcms/documents/file/er-trade-practice112114.pdf>; Tom Polansek, *CFTC Tells CME Group to Work More on 'Spoofing' Detection*, REUTERS (Nov. 24, 2014, 7:51 PM), <https://www.reuters.com/article/us-cftc-cme-spoofing-idUSKCN0J82A520141125>.

CME Group’s Business Conduct Committee panels had authority to impose sanctions of \$1 million per offense, and that authority jumped to \$5 million per offense in December 2016.⁵⁰⁹

In summary, it is probably unrealistic to expect SROs to bridge the enforcement gap created by the CFTC’s limited resources.⁵¹⁰

XII. A Private Right of Action

One final key issue addressed herein is whether there is, or should be, a private right of action to pursue violations of anti-spoofing provisions. The issue appears settled in spoofing cases involving alleged violations of the federal securities laws. SEC Rule 10b-5 provides an implied private right of action to plaintiffs asserting violations of § 10(b)⁵¹¹ and that right should be equally available to plaintiffs asserting spoofing claims under the Exchange Act. Plaintiffs are generally limited to parties that transacted with defendant (or in the relevant market), at prices made artificial by defendant’s manipulative or deceptive device,⁵¹² and they—unlike the SEC⁵¹³ and CFTC—must satisfy the basic elements of reasonable reliance, damages, and loss causation.⁵¹⁴ The strict pleading requirements of the Private Securities Litigation Reform Act⁵¹⁵ no doubt apply in spoofing cases alleging securities violations.⁵¹⁶

The issue is more complicated in spoofing cases commenced under the CEA. Section 22 of the CEA expressly provides a private right of action and enumerates the four exclusive circumstances in which such a right may be asserted.⁵¹⁷ Congress enacted this section after the Supreme Court ruled in 1982 that the CEA contained an implied private right of action.⁵¹⁸ Section 22 provides, *inter alia*, that an express private right of action may be asserted where a person has been harmed through a violation of the CEA that constitutes (i) “the use or employment of, or an attempt to use or employ . . . any manipulative device or contrivance in contravention of” CFTC-promulgated rules or (ii) “a manipulation of the price” of a commodity,

⁵⁰⁹ See Anne M. Termine, Stephen M. Humenik & James Kwok, Covington & Burling LLP, *CME Implements Significant Penalty Increases for Futures and Swaps Trading Violations* (Dec. 20, 2016), <https://www.covfinancialservices.com/2016/12/cme-implements-significant-penalty-increases-for-futures-and-swaps-trading-violations/>. See also Sanders, *supra* note 36, at 539-45 (arguing in favor of lifetime trading bans for spoofing traders).

⁵¹⁰ But see Heinz, *supra* note 102, at 97-98 (arguing in favor of greater anti-spoofing enforcement role for Exchanges).

⁵¹¹ See *Herman & McLean v. Huddleston*, 459 U.S. 375, 380 (1983) (acknowledging that courts have “consistently recognized” a private right of action under Exchange Act § 10(b) and Rule 10b-5).

⁵¹² See, e.g., *Caiola v. Citibank, N.A.*, 295 F.3d 312, 322 (2d Cir. 2010) (noting that standing to pursue private claim for securities fraud “is limited to actual purchasers or sellers of securities”).

⁵¹³ See, e.g., *SEC v. Goble*, 682 F.3d 934, 942-43 (11th Cir. 2012) (“Because this is a civil enforcement action brought by the SEC, reliance, damages, and loss causation are not required elements.”).

⁵¹⁴ See *CP Stone Fort Holdings, LLC v. Doe(s)*, Case No. 16 C 4991, 2017 WL 1093166, at *2 (N.D. Ill. Mar. 22, 2017) (identifying elements of spoofing claim under § 10(b) and Rule 10b-5).

⁵¹⁵ Pub. L. 104-67, 109 Stat. 737 (1995) (codified in scattered sections of 15 U.S.C.).

⁵¹⁶ See *CP Stone Fort Holdings, LLC v. Doe(s)*, Case No. 16 C 4991, 2017 WL 1093166, at *4 (N.D. Ill. Mar. 22, 2017) (discussing whether PSLRA applies in spoofing cases).

⁵¹⁷ See *Klein & Co. Futures, Inc. v. Bd. of Trade of New York*, 464 F.3d 255, 259 (2d Cir. 2006) (“CEA § 22 enumerates the only circumstances under which a private litigant may assert a private right of action for violations of the CEA.”). Accord *MBC Fin. Serv. Ltd. v. Boston Merchant Fin. Ltd.*, 15-CV-00275 (DAB), 2016 WL 5946709, at *10 (S.D.N.Y. Oct. 4, 2016).

⁵¹⁸ *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353 (1982).

future, or swap.⁵¹⁹ Section 22 thus identifies the conditions precedent to a private cause of action. In addition, whereas courts have consistently rejected private claims for aiding and abetting under the Exchange Act,⁵²⁰ the CEA expressly provides a private right of action for willful aiding and abetting of a primary violation.⁵²¹ A private right of action can arise under § 22 even if the commodity is traded on a foreign exchange.⁵²²

Private plaintiffs in several recent cases have relied on § 22 to assert spoofing claims under CEA § 4c(a)(5)(C), CEA § 6(c), and Rule 180.1,⁵²³ or for creating the circumstances under which spoofing was permitted to occur.⁵²⁴ In one such case the federal district court granted defendants' motion to compel arbitration because CBOT Rule 600.A⁵²⁵ requires arbitration of disputes among CBOT members, and dismissed the action without prejudice under the Federal Arbitration Act.⁵²⁶

In a second case, *Mendelson v. Allston Trading LLC*,⁵²⁷ defendant moved to dismiss, arguing that the CEA's private right of action does not extend to alleged violations of § 4c(a)(5)(C).⁵²⁸ The argument was that whereas § 22 provides a private right of action in connection with *manipulation*, it does not provide such a right in connection with *disruption*, and § 4c(a)(5)(C) prohibits *disruptive* practices such as spoofing. As noted in the motion to dismiss, when Congress amended the CEA in 2010, it deliberately chose to bifurcate the CEA's prohibition on manipulative practices, which appears in § 6, from the prohibition on disruptive practices, which appears in § 4.⁵²⁹ And Congress did not amend § 22 to provide a private right of action in connection with claims of disruptive trading.⁵³⁰ The complaint filed by plaintiff in *Mendelson* had asserted claims under § 4c(a)(5)(C), Rule 180.1, and Rule 180.2, but according to

⁵¹⁹ 7 U.S.C. § 25(a)(1)(D) (2018).

⁵²⁰ See, e.g., *Stoneridge Inv. Partners LLC v. Scientific-Atlanta Inc.*, 552 U.S. 148, 155-56 (2008) (“[T]here is no private right of action for aiding and abetting a § 10(b) violation.”).

⁵²¹ See 7 U.S.C. § 25(a)(1) (2018) (providing private right of action under CEA for anyone who willfully aids or abets a violation of CEA or CFTC rules); *CFTC v. Sidoti*, 178 F.3d 1132, 1136 (11th Cir. 1999) (describing liability under CEA for aiding and abetting liability and control person liability).

⁵²² See *Choi v. Tower Research Capital LLC*, 890 F.3d 60, 67 (2d Cir. 2018). See also Paul J. Pantano, Jr., Elizabeth P. Gray & Neal E. Kumar, Willkie Farr & Gallagher LLP, Client Alert, *CEA Jurisdiction Attaches When Irrevocable Foreign Futures Trades are Executed Via Globex* 3 (Apr. 13, 2018), https://www.willkie.com/~media/Files/Publications/2018/04/CEA_Jurisdiction_Attaches_When_Irrevocable_Foreign_Futures_Trades_Are_Executed_via_Globex.pdf (observing that *Choi* may encourage CFTC and exchanges to pursue spoofing in foreign futures contracts that occurs via U.S.-based trade execution systems).

⁵²³ For example, in November 2018 a putative class of investors sued JPMorgan Chase & Co. and a group of precious metals traders employed by the bank, alleging that defendants engaged in a spoofing scheme in violation of, *inter alia*, Rule 180.1. See Darcy Reddan, *JPMorgan Hit with Class Action Over Spoofing Allegations*, LAW360 (Nov. 8, 2018, 2:50 PM EST), <https://www.law360.com/energy/articles/1100139/jpmorgan-hit-with-class-action-over-spoofing-allegations>; Class Action Complaint at 15, *Cognata v. JPMorgan Chase & Co.*, Case No. 1:18-cv-10356 (S.D.N.Y. Nov. 7, 2018).

⁵²⁴ See, e.g., *Braman v. CME Group, Inc.*, 149 F. Supp. 3d 874, 885 (N.D. Ill. 2015) (observing that CEA does not create a private right of action for spoofing, but adding that plaintiffs instead sought to hold defendants, including CBOT and CME, liable for creating circumstances in which spoofing flourished).

⁵²⁵ See CBOT Rulebook, Ch. 6 (Arbitration), <https://www.cmegroup.com/rulebook/CBOT/> (last visited Mar. 15, 2019).

⁵²⁶ *HTG Capital Partners, LLC v. Does*, No. 15-cv-2129, 2016 WL 612861, at *9 (N.D. Ill. Feb. 16, 2016).

⁵²⁷ *Mendelson v. Allston Trading LLC*, No. 15-cv-4580 (N.D. Ill.).

⁵²⁸ *Allston Trading LLC's Motion to Dismiss, Mendelson v. Allston Trading LLC*, No. 15-cv-4580 (N.D. Ill.).

⁵²⁹ *Allston Trading LLC's Motion to Dismiss, Mendelson v. Allston Trading LLC*, No. 15-cv-4580 (N.D. Ill.).

⁵³⁰ *Id.*

defendant the pleading only alleged a factual basis for spoofing (disruption). There was no factual basis for alleging manipulation and defendant was impermissibly seeking to reclassify disruptive/spoofing conduct as manipulation. Accordingly, the motion argued, there was no private right of action and the matter should be dismissed.⁵³¹

Plaintiff Mendelson voluntarily dismissed before the court considered the substance of defendant's contention that the CEA provides no private right of action in spoofing cases. Is the contention meritorious? Probably not. In several cases courts have assumed without deciding that the CEA does provide a private right of action in cases involving alleged spoofing.⁵³² Moreover, defendant's argument rests on the highly dubious plank that spoofing allegations constitute only a basis for a disruption claim and not a manipulation claim as well. Spoofing is *both* disruptive and manipulative,⁵³³ regardless of Congress's decision to bifurcate the two categories in 2010, and the same conduct can and often will result in charges or claims under multiple sections of the amended CEA. For example, in the CFTC's civil suit against Flotron, he was charged with both spoofing/disruption and manipulation (violations of §§ 4c(a)(5)(C) and 6(c)(1) and Rule 180.1).⁵³⁴

The existence of a private right of action is not the only obstacle confronting private plaintiffs in spoofing and layering cases. In late 2018 private plaintiffs filed two putative spoofing class actions in Chicago⁵³⁵ and New York⁵³⁶ federal district courts. Those plaintiffs face multiple additional hurdles. One is the CEA's statute of limitations for private rights of action, which is two years⁵³⁷ and begins to run when plaintiff has constructive or inquiry notice of defendant's conduct.⁵³⁸ Both of the 2018 class action complaints were filed more than two years after the alleged spoofing occurred, and plaintiffs attempted to hurdle this barrier by alleging fraudulent concealment. According to plaintiffs, spoofing is inherently "self-concealing."⁵³⁹ This is unlikely to be a winning argument, because acceptance would eviscerate the statute of limitations.

The two-year limitations period is a potential obstacle in all spoofing or layering cases commenced by private plaintiffs. But another hurdle—defining an ascertainable and viable class—is unique to class action plaintiffs. The 2018 complaints define the classes to include anyone who transacted in a particular market during a multi-year period. For example, the

⁵³¹ *Id.*

⁵³² *See, e.g.,* Choi v. Tower Research Capital LLC, 890 F.3d 60 (2d Cir. 2018) (vacating decision to dismiss putative class action involving alleged spoofing). *But see* Braman v. CME Group, Inc., 149 F. Supp. 3d 874, 885 (N.D. Ill. 2015) (granting motion to dismiss second amended class action complaint and stating in dicta that the CEA does not create private right of action for spoofing).

⁵³³ *See* Robert Zwirb, Cadwalader, Wickersham & Taft LLP, *United States: Seventh Circuit Upholds First Criminal Conviction for Spoofing* (Aug. 21, 2017), <https://www.findknowdo.com/news/08/11/2017/seventh-circuit-upholds-first-criminal-conviction-spoofing> (observing that in *Coscia*, Seventh Circuit "essentially defined 'spoofing' as a form of what is traditionally understood to mean market manipulation"); McCracken & Schleppegrell, *supra* note 34 ("The intersection of manipulation and disruptive trading . . . has always been part of the regulatory landscape.").

⁵³⁴ *See* Complaint, ¶¶ 2, 3, CFTC v. Flotron, Civ. Action No. 18-158 (D. Conn. Jan. 26, 2018).

⁵³⁵ Boutchard v. Gandhi, Case No. 18-cv-7041 (N.D. Ill. Oct. 19, 2018).

⁵³⁶ Cognata v. JPMorgan Chase & Co., Case No. 18-cv-10356 (S.D.N.Y. Nov. 7, 2018).

⁵³⁷ 7 U.S.C. § 25 (2018).

⁵³⁸ Dyer v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 928 F.2d 238, 240 (7th Cir. 1991).

⁵³⁹ *See, e.g.,* Complaint, ¶ 53, Boutchard v. Gandhi, Case No. 18-cv-7041 (N.D. Ill. Oct. 19, 2018), ("By its very nature, the unlawful activity alleged herein was self-concealing.").

Illinois action defines the class as all persons and entities that purchased or sold E-mini Dow Jones futures contracts, E-mini S&P 500 futures contracts, or E-mini Nasdaq futures contracts, or any options on those contracts, during the period March 2012 to October 2014.⁵⁴⁰ But that definition likely is substantially overbroad. Because the price impact of spoofing is fleeting, plaintiffs' proposed class probably sweeps in many market participants who were not adversely affected by the spoof.⁵⁴¹

Conclusion

Spoofing and layering pose major threats to the integrity and stability of both futures and equities markets and arguments to the contrary are unpersuasive. The CFTC, SEC, and DOJ have recognized these threats and have begun to more aggressively prosecute cases involving such trading behavior. To a much lesser extent, SROs in the futures and equities markets also have begun to tackle this behavior. The ramped-up regulatory and criminal enforcement approach to spoofing and layering has raised a number of novel issues addressed herein. Suggested resolution of those issues includes the following. First, to the extent possible, the CFTC, SEC, and SROs should harmonize their approaches to anti-spoofing and layering enforcement, especially with regard to scienter. Second, courts should join the growing consensus that cryptocurrency is a commodity subject to regulation by the CFTC and the CEA's anti-spoofing provision is not unconstitutionally vague.

Third, regulators should aggressively pursue enforcement actions for failure to supervise in connection with spoofing and layering and courts should extend the prohibition on spoofing to non-traders. Fourth, the CAT should be extended to include futures and Regulation A-T should be implemented. Fifth, SROs cannot be counted on to effectively police spoofing and layering. Fruitful enforcement requires additional resources for the CFTC, but that requirement appears unlikely to be met. In the absence, the CFTC should modify its cooperation and self-reporting program to provide additional incentives that would encourage expanded use of the program. Similarly, the CFTC should work to streamline its whistleblower program, with the objective again of encouraging expanded use of the program. Sixth, courts should recognize a private right of action for spoofing and layering claims. Adoption of the foregoing recommendations can help reduce the major threat currently presented by spoofing and layering to futures and equities markets in the United States.

⁵⁴⁰ See Complaint, ¶ 44, *Boutchard v. Gandhi*, Case No. 18-cv-7041 (N.D. Ill. Oct. 19, 2018).

⁵⁴¹ Laura Brookover, *Spoofing Charges Don't Readily Translate to Private Actions*, LAW360 (Nov. 16, 2018, 3:01 PM EST), <https://www.law360.com/articles/1101401/spoofing-charges-don-t-readily-translate-to-private-actions>.