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# Spoofing Enforcement in an Increasingly Complex World

Market manipulation can take many forms. Spoofing is one form of market manipulation that is attracting increasing levels of government scrutiny and enforcement.

Traders who engage in spoofing attempt to alter short term market prices just long enough to permit them to execute trades at more favorable prices. These traders trick competing traders and their algorithms by placing orders they have no intention of filling ("spoofs"), inducing an instantaneous market reaction to the false orders. Spoofers then profit by buying or selling at a price lower or higher than was available immediately prior to the market's movement. Spoofs typically occur over the span of milliseconds, making detection and prevention extremely difficult.

Layering is a variant of spoofing where the trader enters multiple visible orders on one side of the market at multiple price tiers, which cause the midpoint of the spread to move away from those multiple orders, and the same trader executes a trade on the opposite side of the market.

In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") amended section 4c(a) of the Commodities Exchange Act. This amendment explicitly outlawed spoofing which it defined as the practice of "bidding or offering with the intent to cancel the bid or offer before execution." The Commodity Futures Trading Commission ("CFTC") guidance for spoofing specifies that the actor must have "some degree of intent, or scienter, beyond recklessness[.]" A legitimate, good-faith cancellation or modification of orders" would not violate the law.

<sup>&</sup>lt;sup>1</sup> 7 U.S.C. § 6c(a)(5)(C) (2018). The amended section also prohibits "any trading, practice, or conduct... that (A) violates bids or offers" or (B) "demonstrates intentional or reckless disregard for the orderly execution of transactions during the closing period[.]" *See also* Kluchenek, Matthew F. and Kahn, Jacob L. "Deterring Disruption in the Derivatives Markets: A Review of the CFTC's New Authority over Disruptive Trading Practices." *Harvard Business Law Review Online* 2.120.121 (Mar. 18, 2013) <a href="https://www.hblr.org/2013/03/deterring-disruption-in-the-derivatives-markets-a-review-of-the-cftcs-new-authority-over-disruptive-trading-practices/">https://www.hblr.org/2013/03/deterring-disruption-in-the-derivatives-markets-a-review-of-the-cftcs-new-authority-over-disruptive-trading-practices/</a> (accessed May 5. 2021).

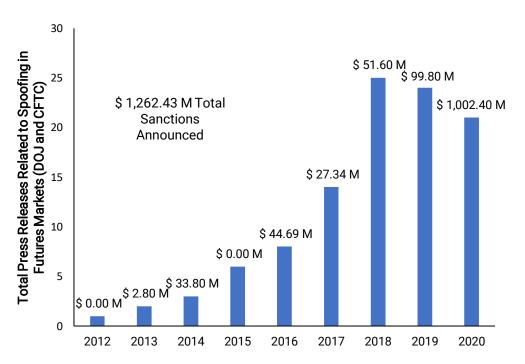
<sup>&</sup>lt;sup>2</sup> Interpretive guidance and policy statement. 78 Fed. Reg. 102 (May 28, 2013) at 31890, 31896. <a href="https://www.cftc.gov/sites/default/files/idc/groups/public/@lrfederalregister/documents/file/2013-12365a.pdf">https://www.cftc.gov/sites/default/files/idc/groups/public/@lrfederalregister/documents/file/2013-12365a.pdf</a> (accessed May 5. 2021).

<sup>&</sup>lt;sup>3</sup> *Id*.

## Spoofing Enforcement

In the past decade, CFTC and the U.S. Department of Justice ("DOJ") have targeted and increased sanctioning pressure against those who allegedly engaged in the practice of spoofing. See Figure 1: CFTC and DOJ Press Releases and Monetary Sanctions in Connection with Spoofing in Futures Markets. According to the press releases, to date, these agencies have imposed more than \$1.26 billion dollars in sanctions for spoofing. Over 70 percent of this amount is attributable to a September 2020 settlement with J.P. Morgan in the amount of \$920.2 million, the largest monetary sanction the CFTC has ever imposed.<sup>4</sup>

**Figure 1**: CFTC and DOJ Press Releases and Monetary Sanctions in Connection with Spoofing in Futures Markets<sup>5</sup>



In 2018, the CFTC announced the creation of a Spoofing Task Force. The agency also moved its Market Surveillance Unit, comprised of "market experts, economists, statisticians, and quantitative analysts...dedicated to detecting fraud, manipulation, and disruptive trading practices," from the Division of Market Oversight to its Division of Enforcement. <sup>6</sup> Both moves

<sup>&</sup>lt;sup>6</sup> Statement of CFTC Director of Enforcement James McDonald. *Commodity Futures Trading Commission* (Jan. 29, 2018) <a href="https://www.cftc.gov/PressRoom/SpeechesTestimony/mcdonaldstatement012918">https://www.cftc.gov/PressRoom/SpeechesTestimony/mcdonaldstatement012918</a> (accessed May 5, 2021). *See also*, 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)



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<sup>&</sup>lt;sup>4</sup> "CFTC Orders JPMorgan to Pay Record \$920 Million for Spoofing and Manipulation [Press release]." *Commodity Futures Trading Commission* (Sept. 29, 2020) <a href="https://www.cftc.gov/PressRoom/PressReleases/8260-20">https://www.cftc.gov/PressRoom/PressReleases/8260-20</a>) (accessed May 5. 2021).

<sup>&</sup>lt;sup>5</sup> Press Releases. *Commodity Futures Trading Commission* <a href="https://www.cftc.gov/PressRoom/PressReleases">https://www.cftc.gov/PressRoom/PressReleases</a> (accessed May 5, 2021) and Justice News. *The United States Department of Justice*. <a href="https://www.justice.gov/news">https://www.justice.gov/news</a> (accessed May 5, 2021).

suggest the CFTC plans to continue its enforcement efforts and recognizes the central role quantitative data analysis plays in identifying and enforcing spoofing claims.

### Susceptibility to Spoofing Allegations

The DOJ, the CFTC and other regulators have increased their efforts to prosecute spoofing and market manipulation, resulting an increasing number of criminal indictments and civil settlements.

Futures market traders may be especially susceptible to spoofing allegations because of the widespread use of automated trading and high frequency trading ("HFT"). Automated trades, those "generated and/or routed without manual intervention," have become increasingly prevalent across all futures markets, accounting for approximately 70.2 percent of futures volume for the two-year period ending Oct. 31, 2018.<sup>7</sup> Automated trades may use algorithms, but HFT is *reliant* on algorithms, makes use of low latency technology and high-speed connections to markets, and exhibits high message rates (orders, quotes, cancellations).<sup>8</sup> These key attributes of HFT result in infinitesimally small lags between specific market conditions (orders and prices) and order executions. While it is illegal for traders to engage in spoofing or layering, many traders effectively and legally utilize high-frequency trading with computer algorithms for placing a high volume of trading orders.

### Example Market Snapshot

Understanding the order book and how transactions occur in the futures market is fundamental to understanding how spoofing works. At any time over the course of a trading day, all resting orders on both sides of a futures market are ranked from best to worst. As traders submit, modify, fill, or cancel orders, the order book is updated to reflect the best outstanding orders at varying prices. In the example below, one second of data from the opening of a trading day in the gold futures market is examined. See Figure 2: Gold Futures Order Book and Trades, 1-Second.

<sup>&</sup>lt;a href="https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/wg1presentation062012.pdf">https://www.cftc.gov/sites/default/files/idc/groups/public/@newsroom/documents/file/wg1presentation062012.pdf</a> (accessed May 5, 2021) at 3 (emphasis added).



<sup>&</sup>lt;a href="https://www.cftc.gov/PressRoom/SpeechesTestimony/opamcdonald1">https://www.cftc.gov/PressRoom/SpeechesTestimony/opamcdonald1</a> (accessed May 5, 2021), and *Division of Enforcement Annual Report. Commodity Futures Trading Commission* (Nov. 2018)

<sup>&</sup>lt;a href="https://www.cftc.gov/sites/default/files/2018-11/ENFAnnualReport111418\_0.pdf">https://www.cftc.gov/sites/default/files/2018-11/ENFAnnualReport111418\_0.pdf</a> (accessed May 5, 2021).

<sup>&</sup>lt;sup>7</sup> Haynes, Richard and Roberts, John S. "Automated Trading in Futures Markets." *U.S. Commodity Futures Trading Commission* (Mar. 13, 2015)

<sup>&</sup>lt;a href="https://www.lexissecuritiesmosaic.com/gateway/CFTC/Speech/file\_oce\_automatedtrading.pdf">https://www.lexissecuritiesmosaic.com/gateway/CFTC/Speech/file\_oce\_automatedtrading.pdf</a> (accessed May 5, 2021); Haynes, Richard and Roberts, John S. "Automated Trading in Futures Markets – Update #2." U.S. Commodity Futures Trading Commission (Mar. 26, 2019) <a href="https://www.cftc.gov/sites/default/files/2019-04/ATS\_2yr\_Update\_Final\_2018\_ada.pdf">https://www.cftc.gov/sites/default/files/2019-04/ATS\_2yr\_Update\_Final\_2018\_ada.pdf</a> (accessed May 5, 2021).

<sup>&</sup>lt;sup>8</sup> CFTC Technical Advisory Committee Presentation. Sub-Committee on Automated and High Frequency Trading, Working Group (June 2012)

Figure 2: Gold Futures Order Book and Trades, A 1-Second Snapshot



Offers are shaded in red and bids are shaded in green. The intensity of bars represents the number of outstanding orders at each price. The numbers within the chart at the left-most and right-most of the presented time interval display the number of resting orders at that moment. The top ten bids and offers (levels 1-10) are shown at each interval throughout the one second time interval, and as traders place, fill, modify, or cancel orders, the order book changes, from left to right.

Traders and their algorithms can use the order book to develop strategies. For example, they may attempt to predict the direction of prices by comparing the number of offers to bids. If an imbalance exists, market prices may move towards the market side possessing the greater total of resting orders. In this example, the

order book is slightly overweight in bids, and a downward trend in trade prices is visible.

In the next article, we will discuss data and expert witness analysis that can assist attorneys in cases involving spoofing allegations.

#### Vega Economics

Vega Economics is an economic consulting firm specializing in expert testimony and data analysis. We deliver exceptional quantitative solutions for both litigation and consulting engagements. Contact us to learn how our prior experience on spoofing cases, familiarity with large datasets, innovative problem-solving, and comprehensive client support can meet your spoofing litigation needs.

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