

3-8-2018

BRIEF FOR AMICI CURIAE JERRY W. MARKHAM AND RONALD H. FILLER IN SUPPORT OF THE PETITIONER (MICHAEL COSCIA v. UNITED STATES) [On Petition For Writ Of Certiorari To The United States Court Of Appeals For The Seventh Circuit]

Ronald Filler

Jerry W. Markham

No. 17-1099

In The
Supreme Court of the United States

—◆—
MICHAEL COSCIA,

Petitioner,

v.

UNITED STATES,

Respondent.

—◆—
**On Petition For Writ Of Certiorari
To The United States Court Of Appeals
For The Seventh Circuit**

—◆—
**BRIEF FOR AMICI CURIAE
JERRY W. MARKHAM AND RONALD H. FILLER
IN SUPPORT OF THE PETITIONER**

—◆—
RONALD H. FILLER*
Professor of Law and Director
FINANCIAL SERVICES
LAW INSTITUTE
NEW YORK LAW SCHOOL
185 W. Broadway
New York, NY 10013
(212) 431-2812
Ronald.Filler@nyls.edu

JERRY W. MARKHAM
Professor of Law
FLORIDA INTERNATIONAL
UNIVERSITY
COLLEGE OF LAW
University Park
Miami, FL 33199

**Counsel of Record*

March 8, 2018

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES.....	ii
INTEREST OF <i>AMICI CURIAE</i>	1
SUMMARY OF ARGUMENT	2
ARGUMENT	8
I. Economics of Commodities Trading	8
II. Growth of Electronic Trading	9
III. Order Entry	12
IV. The “Open Market” Trading Controversy	15
V. Trading Is a Competition and Traders Must Conceal Their True Intentions in Or- der to Be Successful.....	17
CONCLUSION.....	21

TABLE OF AUTHORITIES

	Page
CASES	
<i>ATSI Communications v. The Shaar Fund Ltd.</i> , 493 F.3d 87 (2d Cir. 2007)	16
<i>CFTC v. Khara</i> , Case No. 15 CV 03497 (S.D.N.Y. March 31, 2016).....	7
<i>CFTC v. Oystacher, et al.</i> , 15 CV 9196 (N.D. Ill. Dec. 20, 2016)	7
<i>Ernst & Ernst v. Hochfelder</i> , 425 U.S. 185 (1976).....	3
<i>GFL Advantage Fund Ltd. v. Colkitt</i> , 272 F.3d 189 (3d Cir. 2001)	16
<i>Goldstein v. Mortenson</i> , 113 S.W.3d 769 (Tex. App. 2003).....	10
<i>In the Matter of Arab Global Commodities DMCC</i> , CFTC Doc. No. 18-01 (Oct. 10, 2017).....	7
<i>In the Matter of The Bank of Tokyo-Mitsubishi UFJ, Ltd.</i> , CFTC Doc. No. 17-21 (Aug. 7, 2017)	7
<i>In the Matter of Brims</i> , CFTC Doc. No. 17-13 (March 30, 2017)	7
<i>In the Matter of Citigroup Global Markets</i> , CFTC Doc. No. 17-06 (Jan. 19, 2017).....	7
<i>In the Matter of Deutsche Bank</i> , CFTC Doc. No. 18-06 (Jan. 29, 2018)	7
<i>In the Matter of Gola</i> , CFTC Doc. No. 17-12 (March 30, 2017)	7
<i>In the Matter of HSBC</i> , CFTC Doc. No. 18-08 (Jan. 29, 2018)	7

TABLE OF AUTHORITIES – Continued

	Page
<i>In the Matter of Liew</i> , CFTC Doc. No. 17-14 (June 2, 2017)	7
<i>In the Matter of Posen</i> , CFTC Doc. No. 17-20 (July 26, 2017)	7
<i>In the Matter of UBS AG</i> , CFTC Doc. No. 18-07 (Jan. 29, 2018)	7
<i>In the Matter of Yoshikawa</i> , 2006 SEC LEXIS 948 (April 26, 2006)	4
<i>Markowski v. SEC</i> , 274 F.3d 525 (D.C. Cir. 2001)	17
<i>Merrill Lynch, Pierce, Fenner & Smith Inc. v. Curran</i> , 456 U.S. 353 (1982)	8, 9
<i>Nanopierce Technologies, Inc. v. Southridge Cap- ital Management, LLC</i> , 2002 WL 31819207 (S.D.N.Y.)	16
<i>SEC v. Masri</i> , 523 F. Supp. 2d 361 (S.D.N.Y. 2007)	16
<i>U.S. v. Mulheren</i> , 938 F.2d 364 (2d Cir. 1991)	16
<i>U.S. v. Radley</i> , 632 F.3d 177 (5th Cir. 2011)	15
<i>U.S. v. Regan</i> , 937 F.2d 823 (2d Cir. 1991)	16
<i>U.S. v. Sarao</i> , 15 CR 75 (N.D. Ill. April 2015)	7
 STATUTES	
Commodity Exchange Act of 1936 (7 U.S.C. §1 <i>et seq.</i>)	15

TABLE OF AUTHORITIES – Continued

	Page
The Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (July 21, 2010)	<i>passim</i>
7 U.S.C. §6c(a)(5)(C)	3, 5, 21
 OTHER AUTHORITIES	
Irene Aldridge, <i>HIGH-FREQUENCY TRADING: A PRACTICAL GUIDE TO ALGORITHMIC STRATEGIES AND TRADING SYSTEMS</i> (2d ed. 2013)	10, 19
CFTC, “ <i>Concept Release on Risk Controls and System Safeguards for Automated Trading Environments</i> ,” 78 Fed. Reg. 56,542 (Sept. 12, 2013)	11, 20
CFTC, <i>Glossary of Terms</i> , available at http://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/index.htm	13
Congressional Research Service, <i>High-Frequency Trading: Background, Concerns, and Regulatory Developments</i> (June 19, 2004)	14
Equedia, <i>How Fast is High-Frequency Trading? Faster Than You Think</i> , available at http://www.equedia.com/how-fast-is-high-frequency-trading/	12
Ken Follett, <i>JACKDAWS</i> (2002) (electronic version)	4

TABLE OF AUTHORITIES – Continued

	Page
Richard Haynes & John S. Roberts, <i>Automated Trading in Futures Markets</i> (March 13, 2015), available at http://www.cftc.gov/idc/groups/public/@economicanalysis/documents/file/oce_automatedtrading.pdf	12
Thomas Hieronymus, <i>ECONOMICS OF FUTURES TRADING FOR COMMERCIAL AND PERSONAL PROFIT</i> (1977)	18
<i>High-Frequency Traders Need a Speed Limit</i> , BloombergView, available at http://www.bloombergtv.com/articles/2015-01-25/high-frequency-traders-need-a-speed-limit	12
Interactive Brokers, <i>Iceberg/Reserve Orders</i> , available at https://www.interactivebrokers.com/en/?f=%2Fen%2Ftrading%2Forders%2Ficeberg.php	19
Jerry W. Markham & Daniel J. Harty, <i>For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs</i> , 33 J. CORP. L. 865 (Summer 2008)	10
Jerry W. Markham, <i>High Speed Trading on Stock and Commodity Markets – From Courier Pigeons to Computers</i> , 52 SAN DIEGO L. REV. 555 (2015)	10, 11
Jerry W. Markham, <i>LAW ENFORCEMENT AND THE HISTORY OF FINANCIAL MARKET MANIPULATION</i> (M.E. Sharpe 2014)	4, 15, 16

TABLE OF AUTHORITIES – Continued

	Page
Jerry W. Markham & Ronald H. Filler, REGULATION OF DERIVATIVE FINANCIAL INSTRUMENTS (SWAPS, OPTIONS, AND FUTURES) CASES AND MATERIALS (2014).....	2, 6, 8
Benjamin L. Schwartz, <i>Solution of a Set of Games</i> , 66 AM. MATH. MONTHLY, 693 (1959).....	4
William L. Silber, VOLCKER (2012)	19

INTEREST OF *AMICI CURIAE*

Amicus curiae Ronald H. Filler – is a Professor of Law and the Director of the Financial Services Law Institute at New York Law School. He is the co-author with Professor Markham of a casebook on derivatives regulation that discusses spoofing and other trade practice issues. He is also the author and co-author of numerous articles on futures regulation and has over forty years of experience in the futures industry as a lawyer and scholar. Prof. Filler has taught a course on Commodities Law or Derivatives Law at four different U.S. law schools for over thirty years, starting in 1977.

Amicus curiae Jerry W. Markham is a Professor of Law at the Florida International University College of Law. He is the author and co-author of seventeen books on financial markets, their history and regulation. He has also authored and co-authored dozens of law review articles and other publications on the regulation of futures and other derivative instruments. He was previously a Professor of Law at the University of North Carolina College of Law and taught a course on commodity futures regulation for ten years at the Georgetown Law Center in Washington D.C.¹



¹ The parties have consented to this filing. Notice has been given to the Petitioner and the Respondent. No party authored this brief in whole or in part, and no person or entity other than *amicus curiae* have made a monetary contribution to the preparation or submission of this brief.

SUMMARY OF ARGUMENT

The commodity futures markets play a vital role in the pricing of most of the world's tradable commodities.² The commodities underlying futures contracts include, agricultural products such as wheat and soybeans; petroleum products such as gas and oil; metals such as copper, gold and silver; and financial products, such as the S&P 500 stock index; Libor, the "world's largest number;" and foreign currency exchange benchmarks, such as the exchange rate for the euro and the U.S. dollar. Futures exchanges also play an essential role in pricing U.S. Treasury securities.³

Futures markets historically and legislatively required "open outcry" trading on exchange floors. While that structure required humans to interact with each other as evidenced in the movie, *Trading Places*,³ today, these markets are driven by high frequency traders ("HFTs") that trade on electronic markets. HFTs enter and execute or cancel orders within fractions of a second, many times faster than you can blink your eye. Although more than ninety percent of all HFT orders may be cancelled after they are placed in the

² Commodity futures are "derivative" instruments that derive their value from an underlying commodity. See Jerry W. Markham & Ronald H. Filler, REGULATION OF DERIVATIVE FINANCIAL INSTRUMENTS (SWAPS, OPTIONS, AND FUTURES) CASES AND MATERIALS 1-7 (2014) (describing futures contracts) (hereinafter "Filler & Markham").

³ "Historically, commodity futures were traded primarily on agricultural products, but, today, most commodity futures contracts involve some type of financial instrument." Filler & Markham, *supra*, n. 2 at p. 2.

market, but before their actual execution, the government in this case seeks to criminalize any order 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).” 7 U.S.C. §6c(a)(5). This new law on “spoofing” was enacted by The Dodd-Frank Act in July 2010.⁴

The key element in this spoofing prohibition is that of intent or scienter, which according to the government does not include an intent to defraud.⁵ Rather, the government contends, and the Seventh Circuit agreed, that it is enough to criminalize behavior merely if the actor intended to cancel an otherwise legitimate order before its execution. The government’s position and the Seventh Circuit’s decision ignore the fact that nearly every trader intends to cancel their limit orders before execution. For example, cancellation may be intended in advance of order entry if the market does not respond as predicted or where the order is entered to test market depth and liquidity. Traders are now left to guess when cancellations, which are essential to their business, are criminalized by Dodd-Frank.

The vagueness of this prohibition is also problematic because there was nothing “commonly known to

⁴ The Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-03, 124 Stat. 1376 (July 21, 2010) (“Dodd-Frank Act”).

⁵ *In contrast, see Ernst & Ernst v. Hochfelder*, 425 U.S. 185 (1976) (holding that there must be an intent to defraud and not mere negligence to establish a violation of an anti-fraud statute).

the trade” as “spoofing” at the time of the enactment of this prohibition by Dodd-Frank that even remotely resembles the trading at issue in this case. “Spoofing” as charged in this case, was not commonly known in the industry. Rather, spoofing has been viewed to be many other things in a variety of contexts.

For example, spoofing had historically been associated with a drinking game, which “involved guessing how many coins the other player held in a closed fist.”⁶ In financial markets “spoofing” has been associated with fraud schemes under the federal securities laws involving emails with fake addresses that were purportedly discussing insider or other market sensitive information. The sender of these “spoofed” emails would then profit from market reactions to the false information.⁷ The term spoofing was also later applied to “auto-execution” fraud in the securities markets, an activity that was not based on order cancellations and was unrelated to any trading activity in futures contracts.⁸

⁶ Ken Follett, JACKDAWS 302 (2002) (electronic version) (describing this game). *See also* Benjamin L. Schwartz, *Solution of a Set of Games*, 66 AM. MATH. MONTHLY, 693 (1959) (describing this game).

⁷ Jerry W. Markham, LAW ENFORCEMENT AND THE HISTORY OF FINANCIAL MARKET MANIPULATION 334-335 (M.E. Sharpe 2014) (hereinafter “LAW ENFORCEMENT”).

⁸ This practice was described by the SEC in a footnote *In the Matter of Yoshikawa*, 2006 SEC LEXIS 948 n. 36 S.E.C. (2006) that is less than elucidating:

‘Auto-execution manipulation’ is also commonly referred to as ‘spoofing’. . . . See, e.g. Ian Fishman and

Spoofing was not applied to futures transactions until it appeared in The Dodd-Frank Act of 2010 with little or no advance warning and no hearings on the subject. There is thus no legislative history that would provide any basis for the assertion in the new statute that spoofing “is of the character of, or [was] commonly known to the trade as, ‘spoofing’ (bidding or offering with the intent to cancel the bid or offer before execution).” 7 U.S.C. §6c(a)(5)(C). It is difficult to understand how legislation can criminalize conduct that is “commonly known” as spoofing in the futures industry when no such common knowledge ever existed prior to the enactment of The Dodd-Frank Act in July 2010.

This case provides this Court with the opportunity of addressing the scope of this fatherless crime and to resolve a critical issue that has plagued the courts for decades, *i.e.*, can an “open market” trade that is otherwise permissible be made illegal solely by the perceived intent of the trader in entering the order. An open market trade is one in which there are real parties and real economic risk. The circuit court opinions on this issue are divided and have led to much

Laurence Fishman, Exchange Act Rel. No. 40115 (June 24, 1998), 67 SEC Docket 1107 (order accepting offer of settlement and finding violations of Section 10(b) and Rule 10b-5 where respondents entered 100-share limit orders to alter the NBBO [National Best Bid or Offer], followed with larger limit orders at the new NBBO, then entered a new 100-share limit order to change the NBBO again, following again with a larger limit order taking advantage of the second new NBBO respondents had created);

confusion in the courts and among practitioners and scholars seeking to understand its scope and application.⁹

In light of these conflicting decisions and the advent of electronic trading, the spoofing prohibition makes it untenable for traders to engage in many legitimate trading strategies useful to market liquidity and efficiency. This uncertainty subjects traders to the risk of second-guessing by prosecutors singling out trades among hundreds of millions of cancellation orders that are in fact legitimate open market transactions.

Vague and uncertain prohibitions against order cancellations will inhibit efficient price discovery. This is because traders will be unable to determine the wholly uncertain line of when a cancellation instruction becomes illegal “spoofing” in the mind of a prosecutor. Market efficiency depends on traders to be allowed to trade without fear of after-the-fact determinations of their intent in markets where speed and cancellations are essential to their trading plans and market efficiency.

This situation is even more troubling in view of the fact that the governing regulator, the Commodity Futures Trading Commission (“CFTC”) has not clearly identified which order cancellations are valid and which orders constitute “spoofing.” What then constitutes the “intent” element which must be proven?

⁹ See Filler & Markham, *supra*, n. 2, 528-540 (discussing “open market” manipulations and split in case law).

Guidance from this court is sorely needed because “spoofing” is now being broadly targeted by prosecutors and the CFTC in a number of cases brought nationwide.¹⁰ Moreover, the CFTC had only won one market manipulation case prior to the enactment of The Dodd-Frank Act because it could not prove this intent element. The Dodd-Frank Act did not remove the intent element. Proving this intent element must be the foundation of every civil enforcement and criminal prosecution case.



¹⁰ See Department of Justice (“DOJ”) prosecutions, in addition to this case: *U.S. v. Sarao*, 15 CR 75 (N.D. Ill. April 2015). DOJ charged eight traders on January 29, 2018: Six of those traders were indicted in the Northern District of Illinois: One was charged in the District of Connecticut: Andre Flotron – Another was charged in the Southern District of Texas: Krishna Mohan. The CFTC has brought the following cases and resulting settlements: *In the Matter of UBS AG*, CFTC Doc. No. 18-07 (Jan. 29, 2018) (\$15 million fine); *In the Matter of Deutsche Bank*, CFTC Doc. No. 18-06 (Jan. 29, 2018) (\$30 million fine); *In the Matter of HSBC*, CFTC Doc. No. 18-08 (Jan. 29, 2018) (\$1.6 million fine); *In the Matter of Arab Global Commodities DMCC*, CFTC Doc. No. 18-01 (Oct. 10, 2017) (\$300,000 fine); *In the Matter of The Bank of Tokyo-Mitsubishi UFJ, Ltd.*, CFTC Doc. No. 17-21 (Aug. 7, 2017) (\$600,000 fine); *In the Matter of Posen*, CFTC Doc. No. 17-20 (July 26, 2017) (\$635,000 fine); *In the Matter of Liew*, CFTC Doc. No. 17-14 (June 2, 2017) (permanent trading bar); *In the Matter of Brims*, CFTC Doc. No. 17-13 (March 30, 2017) (\$200,000 fine); *In the Matter of Gola*, CFTC Doc. No. 17-12 (March 30, 2017) (\$350,000 fine); *In the Matter of Citigroup Global Markets*, CFTC Doc. No. 17-06 (Jan. 19, 2017) (\$25 million fine); *CFTC v. Khara*, Case No. 15 CV 03497 (S.D.N.Y. March 31, 2016) (permanent injunction) and *CFTC v. Oystacher*, 15 CV 9196 (N.D. Ill. Dec. 20, 2016) (\$2.5 million fine) (*Amicus* Professor Jerry Markham acted as an expert witness in *Oystacher* for the defendants).

ARGUMENT

I. Economics of Commodities Trading

Derivative markets perform two essential functions: (1) price discovery; and (2) hedging. Price discovery is important because it allows market participants to value their tradeable assets without actually having to sell those items. Such price results in the U.S. futures markets being transparent, meaning that all investors around the globe know to the split second what the price is for a particular commodity.¹¹

There are essentially two broad categories of traders in the commodities markets – hedgers and speculators. Hedging is important because it allows a market participant, such as an asset manager, to offset risks from exposure to financial instruments in an asset-based portfolio or that the portfolio manager anticipates buying in the future. *Merrill Lynch, Pierce, Fenner & Smith Inc. v. Curran*, 456 U.S. 353, 358 (1982) (describing the role and importance of hedging).

The second category of commodity futures traders is the speculator.¹² In *Merrill Lynch v. Curran*, 453 U.S. 353, 358 (1982), this Court noted that speculation in futures contracts serves an important price discovery function. “The advent of speculation in futures markets produced well-recognized benefits for producers and processors of agricultural commodities.” *Id.* This

¹¹ See Filler & Markham, *supra*, n. 2, 24-25 (describing role of futures trading in price discovery).

¹² *Id.* at 25 (describing importance of speculation in futures contracts).

Court further recognized that “[t]he liquidity of a futures contract, upon which hedging depends, is directly related to the amount of speculation that takes place.” *Id.* at 359.

Speculators utilize a broad range of trading styles that exhibit differing patterns in the frequency of their trading. For example, “scalpers” (as they were called on exchange floors), and now HFT on electronic markets, move quickly in and out of positions, rapidly entering and cancelling orders, seeking to take advantage of rapid price changes.

II. Growth of Electronic Trading

Historically, trading on futures exchanges took place on trading floors divided into separate trading “pits” for each commodity traded. The trading pits, at least the more active ones, contained numerous floor brokers and floor traders who traded in sometimes chaotic conditions. Floor trading executions often involved several minutes to execute and report filled orders to customers and process the orders for referral to the clearinghouse.

The open outcry system’s slow executions exposed traders to a market risk inherent in delays, from that “latency.” This is because latency creates a risk that market prices could change adversely between the time of order entry and execution. This risk is referred to as “slippage.” Slippage is one of the most significant costs to traders.

Computerized trading platforms began appearing in the futures and securities markets during the last decade of the twentieth century. These electronic platforms provided order-matching services that proved to be an efficient alternative to floor trading by open outcry. In recent decades, most floor trading has virtually ceased and has been replaced by electronic trading platforms operated by the commodity futures exchanges.

An order is executed through an electronic trading platform where buyers and sellers are matched by algorithmic formulas that generally make these matches based on time and price priority.¹³ HFTs employ computer technology and algorithms that allow the origination, transmission and execution of their orders in times measured in fractions of a second, “a thousand times faster than you can blink your eyes.”¹⁴ High speed trading reduces risks of “slippage” in prices resulting from delays in order entry and execution, *i.e.*, “latency.”¹⁵ HFTs have replaced floor traders as the

¹³ See Jerry W. Markham & Daniel J. Harty, *For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs*, 33 J. CORP. L. 865 (Summer 2008) (describing that transformation).

¹⁴ Jerry W. Markham, *High Speed Trading on Stock and Commodity Markets – From Courier Pigeons to Computers*, 52 SAN DIEGO L. REV. 555, 562 (2015) (“*High Speed Trading*”).

¹⁵ Irene Aldridge, HIGH-FREQUENCY TRADING: A PRACTICAL GUIDE TO ALGORITHMIC STRATEGIES AND TRADING SYSTEMS, 43-44 (2d ed. 2013); *Goldstein v. Mortenson*, 113 S.W.3d 769, 773 (Tex. App. 2003) (“The time expended in placing phone calls allowed market positions . . . to change, often resulting in serious

source of liquidity in futures markets, without which those markets cannot function efficiently.

HFTs minimize latency and slippage by the entry of their orders through high-speed data transmission lines and devices. One HFT trader spent \$300 million to build a high-speed data line between New Jersey and Chicago in order to reduce order latency by three milliseconds. A millisecond is one thousandth of a second. Another fiber optic project of a HFT sought to cut five milliseconds off order entry times between London and New York at a cost of a projected \$500 million. Microwave transmissions were even faster and efforts are underway to reduce latency through laser communications.¹⁶

The HFT's efforts to reduce latency had remarkable success. "Public data from one exchange group, for example, indicates that round trip trade times on its trading platform fell from 127 milliseconds in 2004 to 4.2 milliseconds in 2011."¹⁷ "Another exchange group reported in 2010 that its average blended transaction time in futures and OTC markets was 1.25 milliseconds."¹⁸ In 2014, one exchange determined that 11 percent of all 2014 observable orders lasted less than one

losses. . . . The negative effect resulting from such a delay is known in the industry as 'slippage.'").

¹⁶ *High Speed Trading, supra*, n. 14, 561.

¹⁷ CFTC, "Concept Release on Risk Controls and System Safeguards for Automated Trading Environments," 78 Fed. Reg. 56,542, 56,546 (Sept. 12, 2013) (footnote omitted).

¹⁸ *Id.* (footnote omitted).

millisecond.¹⁹ “In today’s electronic financial markets, a single investor can execute more than 10,000 trades a second, meaning more than 1,000 trades can happen in the blink of an eye.”²⁰

One study found that automated trading systems, *i.e.*, those initiated by algorithms that do not require human intervention in order to issue an order, accounted for the majority of equity futures.²¹ This growth in HFT trading largely occurred before the enactment of the anti-spoofing prohibition in The Dodd-Frank Act and there was nothing in the industry commonly known as spoofing before that legislation.

III. Order Entry

There are numerous types of orders for futures contracts that may be entered by traders. The most basic order is a “market” order. This means that the order is to be executed at the current market price. However, latency may result in slippage, which means that the market order may be executed at an unfavorable

¹⁹ Equedia, *How Fast is High-Frequency Trading? Faster Than You Think*, available at <http://www.equedia.com/how-fast-is-high-frequency-trading/> (accessed on March 4, 2018).

²⁰ *High-Frequency Traders Need a Speed Limit*, BloombergView, available at <http://www.bloombergview.com/articles/2015-01-25/high-frequency-traders-need-a-speed-limit> (accessed on March 4, 2018).

²¹ Richard Haynes & John S. Roberts, *Automated Trading in Futures Markets*, 4 (March 13, 2015), available at http://www.cftc.gov/idc/groups/public/@economicanalysis/documents/file/oce_automatedtrading.pdf (accessed on March 4, 2018).

price. To avoid such concerns, traders often use “limit orders.” A limit order is one in which the trader specifies a price that it may be executed at in the market.²² This limitation helps protect the trader from a loss from adverse market moves that may result from latency and slippage.

Limit orders comprise a large percentage of all orders entered on futures markets. A limit order posted in the order book is only good until cancelled by the trader. All market participants know that a limit order may be cancelled at any time.

In fact, every speculator intends to cancel trades before their execution for a broad range of reasons, hence the high cancellation rates. Indeed, the overwhelming majority of all limit orders entered on electronic trading platforms are cancelled before they are executed. That is, most HFT traders enter futures orders with the intent to cancel the bid or offer, as demonstrated by statistics showing a cancellation rate of well over ninety percent.

Order entry and cancellations also occur at a high rate of speed. A study conducted by the Congressional Research Service (the “CRS Study”) of HFT trading found from data generated in 2013 that:

about 39% of all canceled orders were initially active for a half of one second or less [i.e., 500 milliseconds or less and] about 27% of

²² See CFTC, *Glossary of Terms*, available at <http://www.cftc.gov/ConsumerProtection/EducationCenter/CFTCGlossary/index.htm> (accessed on March 4, 2018) (defining limit order).

executed trades were the result of another trader accessing posted orders within that window of time. The office also found that although 23% of all cancellations occurred within 50 milliseconds, approximately 19% of all the monitored trades took place within that time frame.²³

This high rate of cancellation and the rapidity of order executions is due to the nature of the trading by HFTs who seek quick in-and-out profits. Many HFT traders enter orders they intend to cancel when the market does not respond as predicted by the trader upon the order's entry. Other traders enter orders they intend to cancel in order to test the market by "pinging" it. Other traders enter orders they intend to cancel in order to conceal their actual trading strategies from other traders seeking to take advantage of an observed trading pattern.

Other traders may have preset cancellation instructions if an order is not immediately filled or only partially filled. Do all of these orders constitute "spoofing," any of them? We do not believe so. Query, how do you pick and choose which orders are spoofing and which are not and how are traders to know when their cancellations cross the spoofing line? And, more importantly, how do you prove the requisite intent

²³ Congressional Research Service, *High-Frequency Trading: Background, Concerns, and Regulatory Developments* 20 (June 19, 2004).

element by singling out a few of the thousands of orders placed by a HFT?

IV. The “Open Market” Trading Controversy

Trading in futures contracts is regulated under the Commodity Exchange Act of 1936 (7 U.S.C. §1 *et seq.*) (“CEA”). The Financial Crisis of 2008 led to the extension of regulation under the CEA by The Dodd-Frank Act in 2010 and to the creation of the crime of “spoofing.” That amendment gave rise to the existing controversy, in which the Seventh Circuit concluded that a fraud based standard could be based on intent without a showing of actual or attempted fraud, *i.e.*, is it enough to prove a pre-existing intent to cancel an order even if done without any fraudulent intent?

The Seventh Circuit’s decision in this case has exposed a rift in the circuit courts that concerning whether a so-called “open market” trade (*i.e.*, a trade in which there are real parties and real economic risk that is otherwise legitimate) can be rendered fraudulent based solely on the intent of the actor.²⁴ The present case provides this Court with the opportunity of resolving this critical issue.

The circuit court opinions on this issue are conflicting and confusing. For example, the Fifth Circuit in *U.S. v. Radley*, 632 F.3d 177 (2011) held that traders could dissemble to other market participants concerning their trading intentions by actual orders because

²⁴ See LAW ENFORCEMENT, *supra*, n. 7, §8:3, pp. 378-386.

there is no obligation under the CEA or other laws to disclose trading strategies to other market participants. The Third Circuit also appears to have generally rejected the imposition of liability for open market trades, even if entered with bad intent. *GFL Advantage Fund Ltd. v. Colkitt*, 272 F.3d 189, 205 (3d Cir. 2001), *cert. denied*, 536 U.S. 923 (2002) (“courts must distinguish between legitimate trading strategies intended to anticipate and respond to prevailing market forces and those designed to manipulate prices and deceive purchasers and sellers”).

The Second Circuit has handed down rulings on this issue that are confusing. Compare, *U.S. v. Mulheren*, 938 F.2d 364, 370-371 (2d Cir. 1991) (no manipulation found where transaction was in open market), with, *U.S. v. Regan*, 937 F.2d 823, 829 (2d Cir. 1991), *amended on other grounds*, 946 F.2d 188 (2d Cir. 1991), *cert. denied, sub nom. Zarzechi v. U.S.*, 504 U.S. 940 (1992) (illegal manipulation found for open market trades where trader was trying to depress prices), and *ATSI Communications v. The Shaar Fund Ltd.*, 493 F.3d 87 (2d Cir. 2007) (short selling to the distress of other market participants not actionable in absence of showing intent to create an artificial price).²⁵

²⁵ As a judge in the Southern District of New York has noted “the law of the Second Circuit on the so-called open manipulation – where the alleged manipulator has made otherwise legitimate trades, yet with the subjective intent to affect the stock price thereby – is not fully settled” citing the *Mulheren* decision. *Nanopierce Technologies, Inc. v. Southridge Capital Management, LLC*, 2002 WL 31819207, at 7 (S.D.N.Y.). See also *SEC v. Masri*, 523 F. Supp. 2d 361, 368 (S.D.N.Y. 2007) (the issue of open market

The D.C. Circuit has deferred to the SEC in concluding that otherwise permissible open market trades can be rendered fraudulent solely by the trader's intent. *Markowski v. SEC*, 274 F.3d 525, 528 (D.C. Cir. 2001), *cert. denied*, 537 U.S. 819 (2002). The Seventh Circuit has apparently joined the D.C. Circuit's views in its decision in this case.

In light of these conflicting and confusing decisions, and the advent of electronic trading in which order cancellations are an integral part, the spoofing prohibition makes it untenable to traders engaging in legitimate trading strategies. The vagueness of this criminal statute subjects traders to the risk of second-guessing by prosecutors singling out trades after the fact that are in fact legitimate open market transactions.

V. Trading Is a Competition and Traders Must Conceal Their True Intentions in Order to Be Successful

The Seventh Circuit decision in this proceeding condemns Coscia for "fostering the illusion of demand." Slip Op. at 8. That conclusion ignores the fact that illusions of market demand and the concealment of actual trading strategies of market participants has been an integral part of trading markets since their

trade violations remains open in the Second Circuit and is a matter of uncertainty). *See generally* LAW ENFORCEMENT, *supra*, n. 7, §8:3, pp. 378-385 (discussing these decisions and the uncertainty they have created.)

inception. This is not a moral issue. To the contrary, in considering application of the open market trade doctrine, it is necessary to understand that trading is a competition and that concealment of actual trading strategies is an integral part of that competition, as is the case for nearly every other form of competition.

In football, concealment of the actual strategy for each play is critical to success, and includes such things as “statue of liberty” and “pass-action” plays, and “quarterback sneaks.” In volleyball, the setter tries to fool opponents on where the ball will be placed for return. Baseball pitchers disguise their pitches to fool batters. Hockey players try to deceive the goalie as to where the puck will be sent, and on and on.

Trading in financial markets is no less a competition. As Professor Thomas A. Hieronymus noted some years ago:

[f]utures trading is a contact sport played by competitive people who place a high value on winning. A futures market is not a scholarly seminar in which learned men debate what is, and arrive at, an equilibrium price; it is a game in which businessmen compete, with money at hazard, to establish a market price that works. Competition is sometimes a vicious business but it works well.²⁶

²⁶ Thomas Hieronymus, *ECONOMICS OF FUTURES TRADING FOR COMMERCIAL AND PERSONAL PROFIT* 327-328 (1977).

Traders “disguise their intentions like secret agents.”²⁷ As a part of that competition, active traders try to mask their trading from other market participants, particularly HFTs. This is because a popular HFT strategy is “liquidity detection,” which employs algorithms to take advantage of other traders by detecting and predicting their trading plans or practices based on prior activity.²⁸ Active traders, therefore, seek to avoid trading in sizes, amounts or frequencies that can be detected by HFTs.²⁹

As the CFTC has noted, “order shredding” is a popular deception or illusion used to disguise from and deceive other traders concerning the entry of large orders:

For example, buy-side firms (such as mutual funds and pension funds) may use automated systems and execution algorithms to “shred” one or more large orders (called ‘parent orders’) into a series of smaller trades (‘child orders’) to be executed over time. . . . In addition to automated execution, ATSS may also operate market-making programs; opportunistic,

²⁷ William L. Silber, VOLCKER 289 (2012).

²⁸ Irene Aldridge, HIGH-FREQUENCY TRADING: A PRACTICAL GUIDE TO ALGORITHMIC STRATEGIES AND TRADING SYSTEMS 17 (2d ed. 2013).

²⁹ “Investors submitting large volume orders for . . . futures and options may wish to conceal the full size of their order to avoid anticipatory action from other market participants.” Interactive Brokers, *Iceberg/Reserve Orders*, available at <https://www.interactivebrokers.com/en/?f=%2Fen%2Ftrading%2Forders%2Ficeberg.php> (accessed on March 4, 2018).

cross-asset and cross-market arbitrage programs; and a number of other strategies.³⁰

The entry of limit orders by HFTs is also necessarily coupled with the intent to cancel those orders. That is, if the order is not executed at the limit price or better, the trader intends to cancel the order before its execution and often within fractions of a second. Such orders have long been used in the futures markets, albeit at slower speeds, and are common industry custom and practice.

As another example, orders entered by the same trader on the opposite side of the market at the same price results in the automatic cancellation of the first set of orders. Still other traders “ping” the market by sending out orders they intend to cancel if not executed immediately. This allows price discovery and permits traders to determine the price at which liquidity may be present. These order cancellation practices serve as a price discovery function, not fraud.

Still other traders may show interest on one side of the market in order to deceive other traders as to their true market objectives. This practice has been common to the organized trading markets since their

³⁰ CFTC, “*Concept Release on Risk Controls and System Safeguards for Automated Trading Environments*,” 78 Fed. Reg. 56,542, 56,544 (proposed Sept. 12, 2013) (footnote omitted).

inception, and is a reflection of trading skill not fraud.³¹



CONCLUSION

We believe that the language in Section 4c(a)(5) of the CEA, 7 U.S.C. §6c(a)(5), is unconstitutionally vague and that the criminal conviction of the Petitioner should be reversed. There was never any “commonly known” concept of “spoofing” prior to the enactment of The Dodd-Frank Act in July 2010, and none exists even today.

Respectfully submitted,

RONALD H. FILLER
Professor of Law

JERRY W. MARKHAM
Professor of Law

³¹ See, e.g., LAW ENFORCEMENT, *supra*, n. 7, at 388 (describing the trading acumen of Nathan Rothschild in the 1820s in first entering sell orders in the market in order to disguise and deceive other traders from discovering the fact that he actually was intending subsequently to engage in large purchases).