

At A Glance

Market Manipulation

Overview

A long-standing priority of civil and criminal enforcement agencies, market manipulation enforcement has assumed even greater prominence and garnered broader public attention in recent years. Continually developing trading technologies, as well as exotic financial products available for trading, have created an industry perception that potential manipulative acts are more prevalent than ever in today's markets. High-profile investigations and prosecutions of high-frequency trading firms, as well as large international banks' activities in LIBOR and foreign exchange (FX) markets, have been making headlines in the United States and around the world. Global authorities have also been actively pursuing alleged market manipulators.

NERA economists work on behalf of counsel for both market participants and their regulators in market manipulation litigation and enforcement actions. We bring to bear our training and experience in areas including trading, valuation, and financial regulation. Our economists use quantitative and statistical tools in combination with real-world trading and regulatory experience to provide objective analyses to address the allegations that arise in regulatory investigations and related cases.

Key Areas of Expertise

NERA experts have over 20 years of experience in providing economic advice and testimony to parties involved in market manipulation investigations and litigation, including allegations of front-running, tape painting, index manipulation, "banging" the close, corners and squeezes, price collusion, price misreporting, rumor floating, disruptive trading, wash trading, off-market trading, exchange rules violations, and a variety of market power issues. Different cases often require different sets of analyses and NERA has experience with a wide range of issues. Some examples include:

Confirmation of the Alleged Trading Strategy

NERA's experts have operated as forensic examiners in almost every manipulation case we have worked on. We are known for unveiling hard-to-reach facts and patterns that are buried deep within complex trading datasets. Our data analytics teams have advanced market recreation tools that we use to confirm whether the trading data is, or is not, factually consistent with the alleged manipulation framework. During NERA's process of examining granular trading data, our experts often uncover key facts and details about the trading strategy or the marketplace, information that would otherwise go unnoticed.

Consistency of Trading Strategies: Manipulative or Non-Manipulative?

The confirmation of the existence of an alleged behavior in the data does not axiomatically lead to a finding that a manipulative behavior existed. Our project teams include former financial regulators, market veterans, and leading economists from the academic world. Together, they bring real-world expertise to analyzing market manipulation cases. We are familiar with both buy-side and sell-side trading. Our critical institutional knowledge can help determine whether certain events should be considered manipulative or natural market acts. Often, we can show that a strategy that appears to be a disruptive, manipulative, or fraudulent is actually a perfectly legitimate, competitive, and rational market behavior once we bring our expertise in market practices, risk management principles, and arbitrage concepts to bear.

Price Impact of Alleged Manipulative Actions

If we confirm that a manipulative act has taken place, NERA economists employ sophisticated damage models to assess damages and quantify the harm to the markets. Our models can approximate the exposure to counterparties and estimate the net impact from a manipulative event.

A market manipulation investigation can involve establishing a relationship between a leading event (e.g., an act of market manipulation) and a statistically and economically significant movement of the targeted financial instrument's price. NERA experts are capable of examining for such relationships with a variety of analytical and statistical tools.

Recent Allegations Involving High-Frequency Trading

High-frequency trading (HFT) has increasingly been drawing attention from regulators on both sides of the Atlantic. In particular, there has been an effort to crack down on what might be considered abusive and potentially manipulative trading practices. These practices include "spoofing," and "layering," and "front-running." The lack of regulation for various forms of "front-running," combined with the presence of anti-spoofing laws, has resulted in interesting market microstructure dynamics. The regulation of certain trading strategies, and lack thereof for others, will undoubtedly lead to more HFT disputes in the future.

NERA economists have deep experience dealing with HFT-related market manipulation cases. We were among the first to develop techniques to analyze massive trading data and conduct economic analysis of market manipulation-related trading behavior. Our data capabilities allow our experts to handle cases involving terabytes of complex HFT data. We have developed advanced trade event reconstruction analytics which can identify and examine specific HFT behaviors at the millisecond level. We also have developed customizable market order book visualization tools which help our clients understand granular trading sequences and the market dynamics around certain HFT order events.

Client Experience

NERA experts have provided advice, analysis, and expert testimony in a broad range of actions related to market manipulation matters. We have analyzed problematic trading patterns, suspicious price movement, suspicious trades, benchmarks in question, and market efficiency.

NERA experts have been engaged as independent consultants and testifying experts in a broad range of matters related to alleged commodities market manipulation. We have analyzed problematic trading patterns, suspicious price movement, suspicious trades, benchmarks in question, and market efficiency. The specific markets under examination in these matters include: crude oil, gasoline, heating oil, natural gas, electricity and capacity, dairy products, corn, soy products, grains and cotton gold, silver, platinum, palladium, aluminum, and copper. They have also been engaged as independent consultants and testifying experts in a variety of matters involving alleged manipulation of financial instruments and securities including: equities, equity options, fixed-income securities, equity index futures, options on equity futures, treasury futures, FX, interest rate swaps, eurodollar futures, and structured products.

Examples of recent market manipulation cases in which NERA experts have participated include:

- In response to a joint FINRA / SEC investigation of potential market manipulation, a NERA economist conducted sophisticated economic analysis of a HFT firm's trading data. The HFT firm was accused of spoofing and layering using a rapid order submission and cancellation strategy. Based on the expert analysis, the firm settled with FINRA.
- The Department of Justice retained a NERA economist for an investigation into a potential trading violation by a hedge fund. The hedge fund was alleged to have inflated the value of its portfolio by purchasing most of the shares of several thinly traded stocks to increase the closing price and then 'marking the close' of those stocks, i.e., setting closing prices at the end of trading days by purchasing the stock at an artificially high price.
- NERA economists were retained as testifying experts for an oil trading firm in a class action civil lawsuit alleging market manipulation and antitrust law violations in crude oil futures contracts and the underlying physical crude oil market.
- NERA was engaged by an international financial institution to conduct independent and parallel investigations of the bank's activities in relation to alleged manipulation of LIBOR and FX benchmarks.

About NERA

NERA Economic Consulting (www.nera.com) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For over half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. We bring academic rigor, objectivity, and real-world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance, and litigation.

NERA's clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world's largest economic consultancies. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

Contact

For more information or to contact our experts, please visit www.nera.com/sec-marketmanipulation.