

Market Manipulation and Antitrust: Complements or Substitutes?

Presented to:

NYC Bar Association Antitrust & Trade
Regulation Committee

Presented by:

Shaun D. Ledgerwood

February 25, 2014



What is market manipulation?

Three types of behavior can trigger a manipulation

- **Several recent FERC and CFTC cases involve outright fraud:**
 - Electricity (FERC): *Rumford Paper Company, Gila River Power*
 - Oil (CFTC): *Panther Energy Trading (“spoofing”)*
- **One case involved a manipulation caused by market power abuse:**
 - The DOJ’s *KeySpan-Ravenswood* decision considered a case first brought before the FERC as a market manipulation, but triggered by withholding (resulted in an award of disgorgement as damages – a first for the DOJ)
- **Most of the recent FERC and CFTC anti-manipulation cases focus on the use of uneconomic behavior:**
 - Electricity (FERC): *Constellation Energy Commodities Group, Deutsche Bank Energy Trading, J.P. Morgan Ventures Energy Corporation*
 - Gas (FERC): *Energy Transfer Partners, Amaranth (Brian Hunter), BP*
 - Energy derivatives (CFTC): *In re: DiPlacido (electricity), Optiver Holdings BV (oil), Parnon Energy et al. (oil)*
- **There is need for a common analytical construct across these cases, agencies, statutes, and (given equivalent EU provisions) continents**

Tension between manipulation versus antitrust claims

- **FERC and (recent) CFTC cases are brought under fraud-based rules:**
 - FERC authority granted under the *Energy Policy Act of 2005*
 - CFTC authority granted under *Dodd-Frank* (2010):
 - “Artificial price” statute remains and applies to claims pre-Dodd-Frank
- **However, EU regulators and plaintiffs rely on antitrust claims:**
 - Dawn raids for Platts oil benchmark manipulation performed by EFTA:
 - *Prime International Trading, Ltd. v. BP et al.* (§§ 1 & 2)
 - AL: *Hall Enterprises Metals, Inc. v. Goldman Sachs et al.* (§§ 1 & 2)
 - FX: *Simmtech Co., Ltd. v. Barclays et al.* (§ 1 only)
- **LIBOR class action was stripped of all antitrust and RICO claims:**
 - *In re LIBOR-Based Financial Instruments Antitrust Litigation*
 - J. Buchwald ruled LIBOR is not formed using a competitive process
 - However, the fraud claims were allowed to proceed
- **Question as to whether future claims reside in fraud or antitrust:**
 - Special issue of uneconomic trading, which shares elements of both
 - Other issues (such as collusion) could create exposure to both claims

What is uneconomic trading?

- **Uneconomic trading is:**
 - The intentional accrual of losses;
 - To bias a market outcome;
 - To benefit the value of positions tied to that outcome
- **Losses are measured relative to opportunity costs**
- **Significant problem of proving manipulative intent:**
 - Concern of false positives, as losses are a normal market event
 - Must overcome presumption of transactional legitimacy
 - Need evidence of repeated, anomalous losses + objective evidence
- **Behavior is as old as competition, but only recently prosecutable:**
 - Betting against oneself then throwing a sports match
 - Made illegal in U.S. securities markets in 1942 (SEC Rule 10b-5)
 - Made illegal in U.S. electricity/gas markets in 2005 (EPA Act 2005)
 - Made illegal in U.S. physical petroleum/distillate markets in 2007 (EISA)
 - Made illegal in U.S. futures/derivatives markets in:
 - 1974 (CFTC Act, modifying CEA - artificial price rule)
 - 2010 (Dodd-Frank - fraud-based rule)

Manipulation of a condominium market

- A trader owns one condo, but wants to buy many more
- The market price of equivalent condos is \$500,000, based on a price index tracking the last 30 days' average sales
- Hundreds of identical condos for sale in this market, all offered at or near the \$500,000 index price
- **If the trader offers its condo to the market for \$100,000:**
 - The sale executes immediately - Trader incurs an opportunity cost-based loss of \$400,000
 - Note that any seller can execute trades below the competitive price at will and without the need of market power
- **Loss-based sale is observable evidence of anomalous market behavior and raises a question of the trader's intent**

Condominium market example (continued)

- **Once this sale is recorded, it will register on the index and lower the average market price (the sale is “price-making”)**
- **If the condo index contained 19 prior sales at \$500,000:**
 - Trader’s \$100,000 sale lowers the average index price to \$480,000
 - Everyone who owns a condo takes a potential \$20,000 loss
- **Trader next buys 50 condos at the lower index price:**
 - These purchases are as a *price-taker* to the index
 - Trader saves \$20,000 on 50 condos = \$1 million by this strategy
 - Net profit of \$600,000 (\$1 million – its \$400,000 opportunity loss)
- **These transactions are separable by cause and effect:**
 - The trader used an uneconomic price-making transaction (a *trigger*)
 - To move an indexed price to benefit a price-taking position (a *target*)
 - By exploiting a *nexus* that exists between the trigger and target

Market power is not needed to move market prices

- **The trader in the condo example was 1 of 20 index sellers:**
 - Trader has market share of 5% of all price-making trades
 - This demonstrates that market power is not needed to move prices
 - Issue becomes the liquidity of the index
- **Traders without market power can thus move prices by intentionally executing uneconomic transactions:**
 - Sellers post offers below the market price or sell in large volumes
 - Buyers post bids above the market price or buy in large volumes
 - Traders could combine or collude to increase effect
- **Profitability of the manipulation is a function of the financial leverage built in the targeted position**
- **Traditional economic analyses do not explain this behavior as they presume market power is needed to move prices**
- **Liquidity on index prevents the ability to manipulate:**
 - Risk of false positives chills legitimate trading & potentiates manipulation

Corollaries between manipulation and antitrust

- **Key aspect of uneconomic trading is its effect on output:**
 - Antitrust claims arise due to an act of output restriction (withholding)
 - By comparison, uneconomic trading causes the market to overproduce
 - Market inertia fights the stand-alone price effects of withholding, but assists the stand-alone price effects of overproduction
- **A “deadweight loss” accrues from either activity:**
 - Withholding: deadweight loss to the left of the competitive equilibrium
 - Uneconomic trading: deadweight loss to the right of that equilibrium
 - Either circumstance causes an inefficient redistribution of wealth
- **Uneconomic trading is an analogue of predatory pricing:**
 - Predation standard under *Brooke Group/Matsushita*:
 - Demonstration of below-cost (*i.e.*, uneconomic) sales (Areeda-Turner)
 - Proof of recoupment through later supracompetitive pricing of same good
 - Proof of downward price manipulation using uneconomic trades:
 - Demonstration of uneconomic sales to suppress price
 - Proof of recoupment through any positions tied to that price
 - **Only difference is the source of the recoupment**



A framework for the analysis of market manipulation

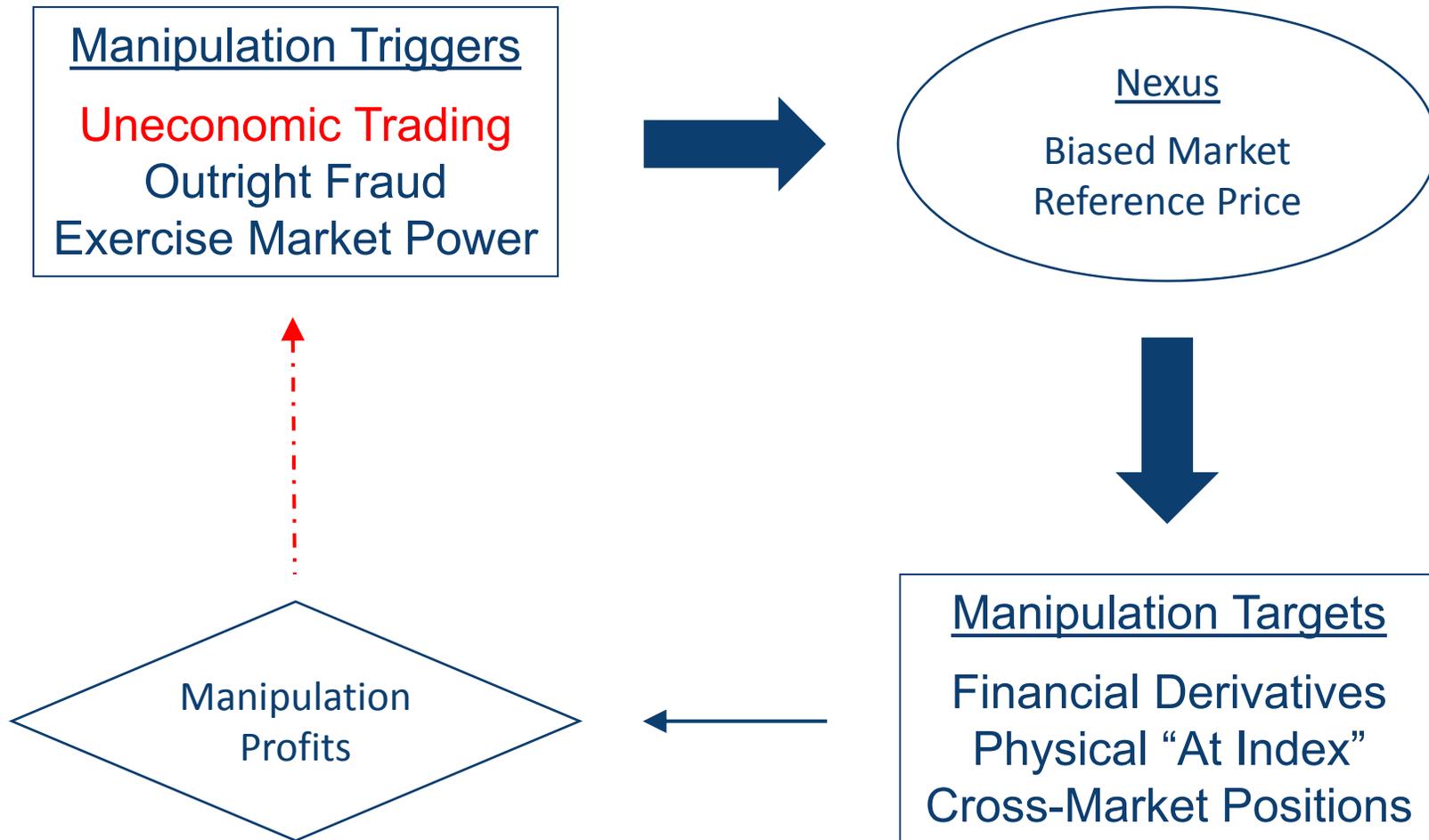
Example-based enforcement causes uncertainty

- **A key complaint about example-driven manipulation enforcement is the uncertainty it provides:**
 - “I know it when I see it” approach complicates compliance, potentially decreasing market liquidity by chilling legitimate trading
 - “False positives” may lead to wrongful allegations requiring vigorous legal defense at great expense to firms and individual traders
- **There is need for a practical way to distinguish behavior that serves a stand-alone, legitimate business purpose from that which is considered potentially manipulative:**
 - Begin with a presumption that the trading is legitimate, then test to see if this hypothesis is anomalously rejected
- **A useful framework would analyze manipulation cases consistently across products, markets, and agencies:**
 - This framework needs to explain the logic of past manipulation cases and prescribe guidance to assist future compliance so that traders can have certainty regarding what trades are legitimate vs. manipulative

A framework to analyze manipulation

- **One way to explain the cause and effect of manipulation is to separate the analysis into a framework of three pieces:**
 - A trigger – Acts intended to directionally bias a market outcome
 - A target – One or more position(s) that benefit from that bias
 - A nexus – A provable linkage between the trigger and target
- **For example, triggers of a price-based manipulation are:**
 - Transactions that intentionally lose money to alter a price
 - Statements or actions that misrepresent value to alter a price
 - Use of market power to alter a price
- **Targets of a price-based manipulation could be:**
 - Physical commodity priced “at index”
 - Financial derivatives positions
 - Other related market positions
- **The nexus of the manipulation could be any reference price, including a price determined from an index or auction**

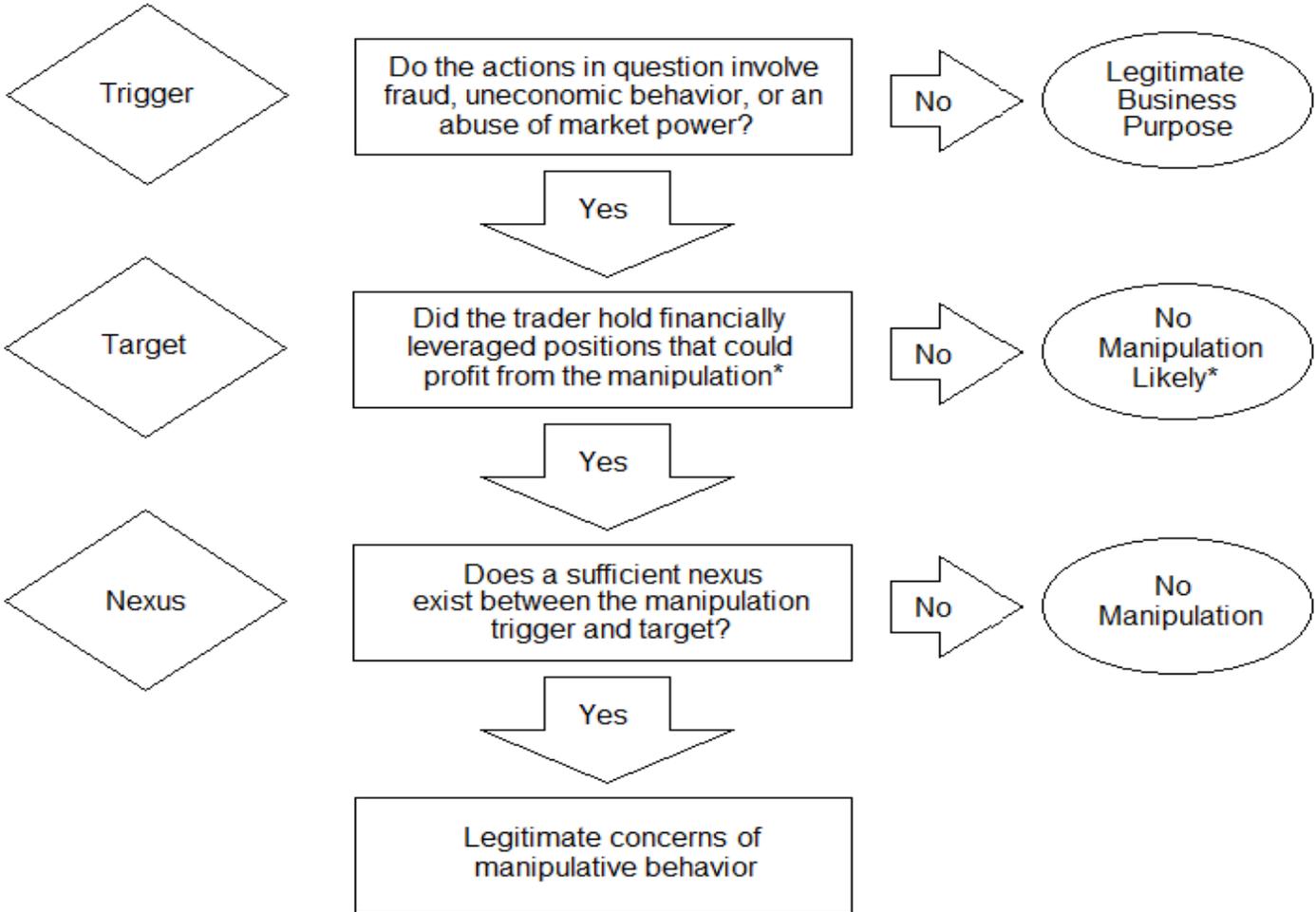
A framework to analyze price-based manipulation



Things that make a successful manipulation more likely

- **Cheaper triggers (measured on a stand-alone basis):**
 - Uneconomic trading requires the manipulator to bear some cost of the manipulation (*i.e.*, transactional fraud)
 - Outright fraud allows the manipulator to trick others into bearing the full cost of the manipulation
 - The manipulator actually profits from the exercise of market power
- **The ability to acquire greater leverage in targeted positions:**
 - Large physical market traded “at index”
 - Explosion of trading in derivatives and speculation in energy futures provides many venues from which to assemble positions
 - Explains ability of large financial players to manipulate markets
- **Greater inelasticity of supply and/or demand:**
 - Lack of sufficient market liquidity magnifies this effect
 - Energy markets are ripe for manipulation given reliance on price indices, access to derivatives and complex product relationships

Analysis of an alleged manipulation using framework



*Not all financial positions may be observable

Applications of the framework

- **Compliance-related seminars:**
 - Provide traders and compliance executives with a holistic understanding of the types of behavior that are legitimate versus manipulative
- **Internal and market surveillance:**
 - Real-time and forensic analysis of potential triggers & targets
 - Goal is to identify problematic behavior early before it expands
 - Approach designed to minimize “false positives” and “false negatives”
- **Analysis of alleged manipulation claims:**
 - Framework clarifies the instrument(s) and type(s) of behavior involved
 - Approach consistent with meeting/refuting legal burdens of proof
 - Best to bring in this analysis sooner rather than later
- **Uses for defending against manipulation allegations:**
 - Internal evaluation of behavior in consideration of self-reports
 - Evaluation of actions alleged in referrals or agency preliminary findings
 - Assistance with preparations for depositions/trial
 - Serves as the foundation for expert testimony

Additional Resources

- “Using Virtual Bids to Manipulate the Value of Financial Transmission Rights,” coauthored with Hannes Pfeifenberger. *The Electricity Journal*, vol. 26, issue 9, pp. 9-25 (November 2013).
- “Uneconomic trading and market manipulation.” *Energy Risk Magazine*, p. 32 (July 2013).
- “A Framework for Analyzing Market Manipulation,” coauthored with Paul Carpenter. *Review of Law & Economics*, vol. 8, issue 1, pp. 253–295, ISSN (Online) 1555-5879, DOI: 10.1515/1555-5879.1577 (September 2012).
- “Rummaging through the Bottom of Pandora’s Box: Funding Predatory Pricing through Contemporaneous Recoupment,” coauthored with Wesley Health. *Virginia Law and Business Review*, v. 6, No. 3, pp. 509-568 (April 2012).
- “A Comparison of Anti-Manipulation Rules in U.S. and EU Electricity and Natural Gas Markets: A Proposal for a Common Standard,” coauthored with Dan Harris, *Energy Law Journal*, vol. 33, p.1 (April 2012).
- Other documents are available at www.brattle.com.



Speaker and company information

Presenter Information



SHAUN D. LEDGERWOOD

Principal | Washington, D.C.

Shaun.Ledgerwood@brattle.com

+1.202.419.3375

Dr. Ledgerwood specializes in issues of market competitiveness with an emphasis on the economic analysis of market manipulation. He previously served as an economist and attorney for the FERC in its enforcement proceedings involving Energy Transfer Partners, L.P., Amaranth Advisors, LLC, and several other cases. He has built upon these experiences to develop a framework for defining, detecting and analyzing manipulative behavior. He has worked as a professor, economic consultant, attorney, and market advisor to the regulated industries for over twenty years, focusing on issues including ratemaking, power supply, resource planning, and electric asset valuations. In his broader practice, he specializes on issues in the analysis of liability and damages for actions based in tort, contract or fraud. He has testified as an expert witness before state utility commissions and in federal court.

The views expressed in this presentation are strictly those of the presenter(s) and do not necessarily state or reflect the views of The Brattle Group, Inc.

Copyright © 2014 The Brattle Group, Inc.

About Brattle

The Brattle Group provides consulting and expert testimony in economics, finance, and regulation to corporations, law firms, and governments around the world. We aim for the highest level of client service and quality in our industry.

We are distinguished by our credibility and the clarity of our insights, which arise from the stature of our experts, affiliations with leading international academics and industry specialists, and thoughtful, timely, and transparent work. Our clients value our commitment to providing clear, independent results that withstand critical review.

Our Practices

PRACTICES

- Antitrust/Competition
- Commercial Damages
- Environmental Litigation and Regulation
- Forensic Economics
- Intellectual Property
- International Arbitration
- International Trade
- Product Liability
- Regulatory Compliance & Enforcement
- Regulatory Finance and Accounting
- Risk Management
- Securities
- Tax
- Utility Regulatory Policy and Ratemaking
- Valuation

INDUSTRIES

- Electric Power
- Financial Institutions
- Natural Gas
- Petroleum
- Pharmaceuticals, Medical Devices, and Biotechnology
- Telecommunications and Media
- Transportation

Offices

NORTH AMERICA



Cambridge



New York



San Francisco



Washington, DC

EUROPE



London



Madrid



Rome