

# TRADE SURVEILLANCE CAPACITIES

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**VEGA  
ECONOMICS**

# ABOUT VEGA ECONOMICS

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*WE DELIVER THE HIGHEST QUALITY WORK USING CUTTING-EDGE TECHNOLOGY WHILE PROVIDING THE PERSONAL ATTENTION THAT YOU CAN ONLY GET FROM A BOUTIQUE CONSULTING FIRM.*

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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. We have earned our reputation for excellence from our innovative problem-solving, comprehensive client support, and meticulously executed reports.



# THE VEGA APPROACH TO TRADE SURVEILLANCE

Trade surveillance has become an essential tool for detecting unusual activity in financial transactions. Vega Economics has extensive experience in this area and we have worked on the leading edge of data driven analysis for trade surveillance and monitoring. Vega has provided trade analysis for a range of uses in regulatory and court proceedings.

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## TRADING DATA ANALYSIS CAPABILITIES

Vega Economics offers the entire panoply of capabilities in the trading data analysis arena and has provided subject matter expertise on a range of trading data matters.

Vega implements quantitative analysis to look for unusual patterns in securities and commodity transactions. We seek out the most current sources of information and techniques and use these to look for patterns in trading activity. When an unusual transaction is uncovered, the focus shifts to that transaction and others made by the same individual or company.

Quantitative analysis is an essential tool in identifying trading activity patterns. An analyst may manage a series of trading data databases with information obtained from multiple sources. Additional material such as business and financial records may also prove useful in analyzing trading data and other exemplars can be helpful in validating the analysis. In some cases, an algorithm can be used to identify unusual trading patterns.

In addition to identifying unusual transaction patterns, Vega often uses the information learned in our analysis to recommend changes in future surveillance actions. From methodology and statistical analysis to strategic advice and data-sharing operations, analysts can provide guidance that helps others deal with the current matter while developing the skill set to handle future trading surveillance needs.

## EXAMPLE ENGAGEMENTS

### **Spoofing Conduct in Criminal Matter**

Vega was retained by counsel for a trader, in connection with a criminal sentencing proceeding, in a case arising out of spoofing conduct in the precious metal futures markets. Vega analyzed the relevant economic issues and trading records and Dr. Daphne Chen, Managing Director, provided expert testimony in response to the opposing expert's loss calculation, the adjustments to the loss calculation, and the gain calculation.

## EXAMPLE ENGAGEMENTS CONT.

### Price Manipulation Investigation In Bond Market

Vega was also retained by a law firm to investigate potential price manipulation in certain bond markets. As part of the engagement, Vega performed economic analysis using the primary and secondary market transactions that were required to be reported by registered broker-dealers.

### Manipulation Investigation In Metal Futures Market

The Vega team has also assisted the CFTC, performing quantitative analysis to establish evidence of manipulation, by a certain trader, in the precious metal futures markets. As a result of these efforts, the agency successfully established the first permanent ban of a trader from trading in any regulated market.

## SELECTED EXPERTS



### Daphne Chen, PhD.

Dr. Chen, the Managing Director of Vega Economics, has over ten years of experience in economic research and data analysis. She has worked on more than fifty matters involving a wide variety of securities and markets, including the precious metal futures market. Her work includes analysis of large datasets of trading and order book data.

### Jeff Harris, PhD.

Dr. Harris is the Gary Cohn Goldman Sachs Endowed Chair in Finance at the Kogod School of Business at American University. Dr. Harris has an extensive background in market microstructure and regulatory issues. He recently served as Chief Economist at the U.S. Commodity Futures Trading Commission.



### Petter Kolm, PhD.

Dr. Kolm is a Clinical Full Professor and the Director of the M.S. in Mathematics in Finance Program at the Courant Institute of Mathematical Sciences at NYU. Dr. Kolm has provided services in areas including alternative data, data science, econometrics, high frequency trading, quantitative and systematic trading, risk management, robo-advisory, smart beta strategies, and trading strategies.





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