

Market Abuse Case Studies

JP Morgan Spoofing in Treasuries and Precious Metal Futures

Market Abuse Case Study No: 002	Name: JP Morgan Chase & Co.
Offence: Spoofing in US Treasuries and Precious Metal Futures	Detection Control: MAST Layering/Spoofing Metric

 TradingHub

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Market Abuse Case Study No:
002

Name:
JP Morgan Chase & Co.

Civilian Authority:
Commodity Futures Trading
Commission (CFTC); U.S
Department of Justice

Offence:
Spoofing in US Treasuries and
Precious Metal Futures

Detection Control:
MAST Layering/Spoofing Metric

Findings:
The "Subject UST Traders placed
Deceptive UST Orders with
the intent to fraudulently and
artificially move the price of a
given U.S. Treasuries Product".

Key Facts

In 2020, the CFTC fined JP Morgan \$920 million for manipulating the price of precious metal and US. Treasury futures contracts via an unlawful spoofing scheme.

The CFTC alleged that from at least 2008 through 2016, numerous traders at JP Morgan from its precious metals and Treasuries trading desks "placed hundreds of thousands of spoof orders in precious metals and U.S. Treasury futures contracts on the Commodity Exchange, Inc. (COMEX), the New York Mercantile Exchange, and the Chicago Board of Trade."

The traders would place one or more spoof orders on one side of the market whilst simultaneously placing one or more genuine orders on the opposite side. The spoof orders created an imbalance in the order book between the resting buy and sell quantities.

This skew misled other market participants into believing there was more interest in buying or selling the futures contract. As a result, the price would move in a direction that benefitted the traders' genuine orders on the other side of the market. The traders would then cancel their spoof orders before execution.

In its statement, the CFTC concluded that "through these spoof orders, the traders intentionally sent false signals of supply or demand designed to deceive market participants into executing against other orders they wanted filled."

Court Findings

The District of Connecticut found that both JP Morgan's precious metals and Treasuries trading desks "intended to inject false and misleading information about the genuine supply and demand" for both precious metals futures and U.S. Treasuries "into the markets, and to deceive other participants in those markets into believing something untrue, namely that the visible order book accurately reflected market-based forces of supply and demand."

"This false and misleading information was intended to, and at times did, trick other market participants, including competitor financial institutions and proprietary traders, into reacting to the apparent change and imbalance in supply and demand by buying and selling" precious metals futures contracts and U.S. Treasuries "at quantities, prices, and times that they otherwise likely would not have traded."

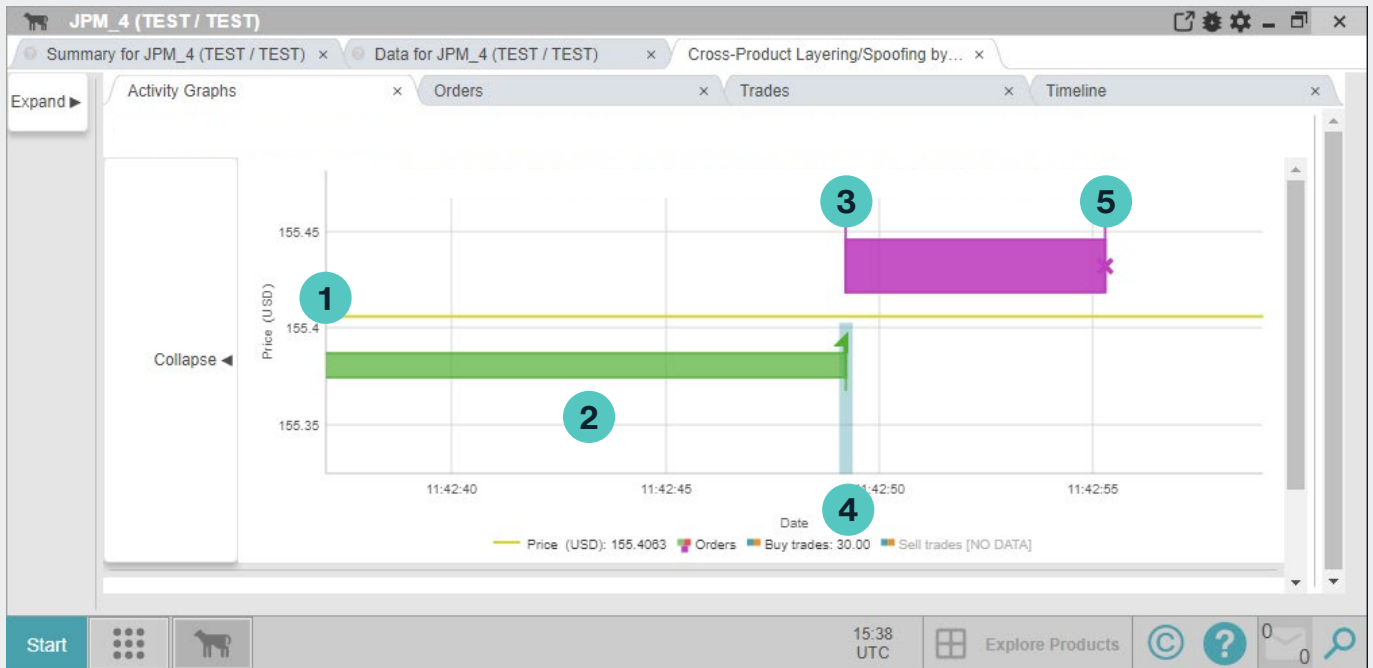
JP Morgan placed deceptive orders "with the intent to fraudulently and artificially move the price" of a given precious metals futures contract or U.S. Treasury "in a manner that would increase the likelihood that one or more of their opposite side... orders would be filled by other market participants, allowing the... traders to generating profits and avoid losses for themselves and other members of the... desk itself, and ultimately, JPMS and the Company."

As a result, the court charged JP Morgan with two counts of wire fraud, in violation of Title 18, United States Code, Section 1343. Under the resulting plea agreement, JP Morgan agreed to pay \$920 million comprising disgorgement, victim compensation and a criminal fine.

<https://www.justice.gov/opa/press-release/file/1320576/download>

Detecting spoofing with MAST

On December 3rd 2015, Trader A placed a spoof sell order for 100 Ultrabond futures contract to benefit a genuine order on the other side of the order book.



1. At 11:42:18.223, Trader A entered a genuine iceberg order to buy 30 Ultrabond futures contracts.
2. The order went unfilled for around half a minute.
3. At 11:42:49.203, the trader entered a spoof order to sell 100 Ultrabond futures contracts.
4. Almost immediately at 11:42:49.212, the genuine order was filled in its entirety.
5. Only six seconds later at 11:42:55.282, the trader cancelled their spoof order.

JPM_4 (TEST / TEST)						
Summary for JPM_4 (TEST / TEST) x Data for JPM_4 (TEST / TEST) x Cross-Product Layering/Spoofing by... x						
Activity Graphs x Orders x Trades x Timeline x						
Event Date	Time Delay (ms)	Event Details	Instrument	Event USDValue	Event Amount	
2022-05-16 11:42:18.223	0.00	Order 'JPM_4_01' Placed	Ultra T-Bond M2022 Futu...	-3.05	30.00	
2022-05-16 11:42:49.203	30,980.00	Order 'JPM_4_02' Placed	Ultra T-Bond M2022 Futu...	15.84	-100.00	1
2022-05-16 11:42:49.212	9.00	Trade 'T_JPM_4_01' Exe...	Ultra T-Bond M2022 Futu...	15.84	30.00	
2022-05-16 11:42:49.212	0.00	Order 'JPM_4_01' Execu...	Ultra T-Bond M2022 Futu...	-3.05	30.00	
2022-05-16 11:42:55.282	6,070.00	Order 'JPM_4_02' Cance...	Ultra T-Bond M2022 Futu...	15.84	-100.00	2

1. The trader entered their spoof order at 11:42:49.203. Almost immediately, their genuine order was filled.
2. Only six seconds later at 11:42:55.282 the trader cancelled their spoof order.
3. MAST calculates a severity score for each trade and order. In this instance, it has assigned the large spoof order a score of **\$15.84**.

For a walkthrough of spoofing in US Treasury markets, please see the related case studies of Tyler Forbes and NatWest Markets.

How MAST recognises spoofing

MAST's Layering/Spoofing metric detects spoofing by measuring the degree to which the market impact of a potential spoof order benefits any transactions on the other side of the market. It balances this benefit by also considering the risk to the trader of placing a spoof order, namely the cost to them of having to unwind an unwanted execution.

By measuring market impact, MAST is able to recognise that the trader's spoof sell order for 100 Ultrabond futures contracts exerted downwards pressure on the price from which their resting buy order on the other side of the order book benefitted. It derives a USD Value to capture the severity of the instance. This lets users prioritise the most serious cases of spoofing for investigation.

How MAST detects cross-product abuse

MAST's general market modelling allows the system to understand how positions across a combination of instruments (bonds, futures, swaps etc...) and across a series of maturities are all linked and can share sensitivities to common factors – like the shape of convenience curve and the price of the spot for commodities, or the shape of the interest rate curve for rates.

Should the traders have used a mix of different futures contracts, MAST would have remained capable of detecting the abuse. To do so, MAST recognises that the value of each Treasury is sensitive to changes in the dollar yield curve. It therefore links the trades and orders together through the hypothetical market impact they have on this yield curve.

THE CHALLENGES OF FIXED INCOME MARKET SURVEILLANCE SERIES

In **Part One**, we explore why fixed income is different, particularly in relation to cross-product abuse.

In **Part Two**, we explore market manipulation and how we might use market impact models to address the challenges of fixed income market surveillance.

In **Part Three**, we discuss market abuse utilising multiple products, also known as cross-product abuse, with a focus on the fixed income asset class.

Advance your surveillance function

Detect cross-product abuse,
reduce false positives, and
prioritise high-risk alerts.

Reach out to learn more.



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