

Market Abuse Case Studies

Deutsche Bank Spoofing in Treasury and Eurodollar Futures

Market Abuse Case Study No: 003	Name: Deutsche Bank Securities Inc.
Offence: Spoofing US Treasury and Eurodollar Futures	Detection Control: MAST Layering/Spoofing Metric

 TradingHub

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003

Name:
Deutsche Bank Securities Inc.

Civilian Authority:
U.S. Department of Justice

Offence:
Spoofing US Treasury and Eurodollar Futures

Detection Control:
MAST Cross-Product Layering/
Spoofing metric

Findings:
The Traders placed the Spoof Orders to induce other market participants to fill the Traders' Genuine Orders on the opposite side of the market.

Key Facts

In 2020, the CFTC fined Deutsche Bank \$1.25 million for manipulating the price of U.S. Treasury and Eurodollar futures contracts on the Chicago Mercantile Exchange (CME) via an unlawful spoofing scheme.

The CFTC alleged that from at least January 2013 through December 2013, two traders at Deutsche Bank Securities Inc. "engaged in the proprietary trading of futures contracts on the Chicago Mercantile Exchange, a designated contract market located in the United States".

Although both traders were based in Tokyo, they spoofed in different markets. Whereas Trader A targeted the Treasury futures market, Trader B targeted the Eurodollar futures market. Both traders "manually placed bids or offers on CME with the intent to cancel those bids or offers before execution".

As they worked from Tokyo, they typically traded during New York overnight hours, when trading volume and volatility were substantially reduced. This meant their spoof orders had a larger impact on the balance of bids and offers visible in the order book.

The CFTC observed that the traders would spoof on the opposite side of the same market or in a correlated market for a different tenor of Treasury futures contracts. This meant that they were taking advantage of the shared underlying risk exposure of futures contracts with different tenors to perpetrate cross-product abuse.

Regulator Findings

The CFTC concluded that "two Deutsche Bank traders engaged in the disruptive practice of "spoofing" (bidding or offering with the intent to cancel the bid or offer before execution) with respect to Treasury and/or Eurodollar futures contracts traded on the Chicago Mercantile Exchange ("CME")".

The traders "manually placed a smaller bid or offer at or near the best price (the "Genuine Order") and a larger bid or offer on the opposite side of the same or a correlated market, which the Traders intended to cancel before execution (the "Spoof Orders"), such that the Spoof Orders would be active at the same time as the Genuine Orders".

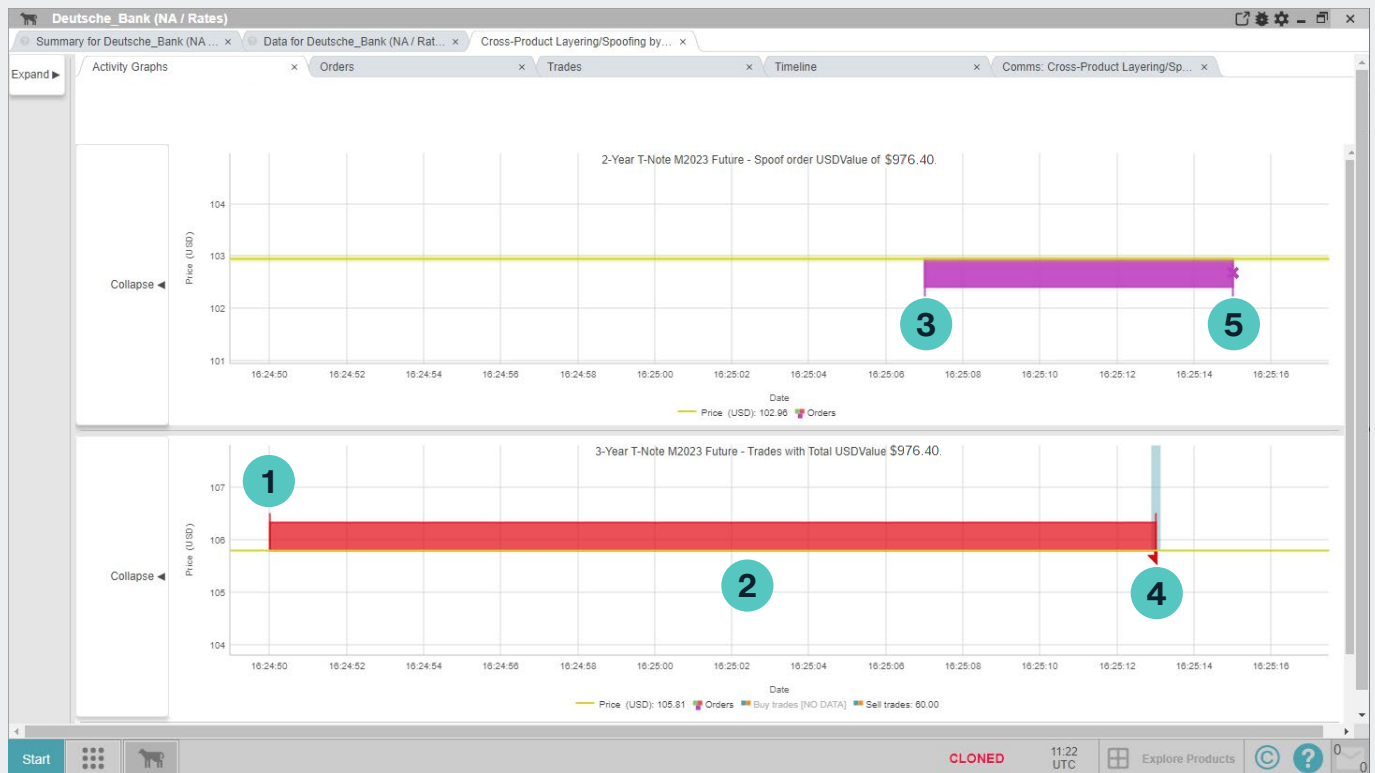
"The Traders placed the Spoof Orders to induce other market participants to fill the Traders' Genuine Orders on the opposite side of the market. Typically, once the Genuine Orders were filled, the Traders would cancel the Spoof Orders. The Traders utilized this general pattern of spoofing on multiple occasions during the Relevant Period."

In a separate press release, the CFTC stated it was "committed to ensuring the integrity of the marketplace. This enforcement action is yet another example of the CFTC's commitment to aggressively prosecute conduct that undermines that integrity."

In its court order, the CFTC accused Deutsche Bank of violating Section 4c(a)(5)(C) of the Commodity Exchange Act and levied a civil penalty of \$1.25 million. Deutsche Bank consented to the order and paid the penalty.

<https://www.cftc.gov/media/4026/enfdeutschebanksecuritiesorder061820/download>

Detecting spoofing with MAST



1. At 16:24:50 pm, the trader entered an order to sell 60 3-year T-Note futures contracts.
2. The orders went unfilled for several seconds.
3. At 16:25:07, the trader entered a spoof order to buy 2,000 2-year T-Note futures contracts.
4. Almost immediately, they were able to fill their existing sell order in 3-year T-Note futures.
5. The trader cancelled their spoof order 8 seconds after having placed it.

Event Date	Time Delay (ms)	Event Details	Instrument	Event Amount	Event Price
2023-05-01 16:24:50.000	0.00	Order 'DB_1_01' Placed	3-Year T-Note M2023 Future	-60.00	105.81
2023-05-01 16:25:07.000	17,000.00	Order 'DB_1_03' Placed	2-Year T-Note M2023 Future	2,000.00	102.96
2023-05-01 16:25:13.000	6,000.00	Trade 'T_DB_1_01' Executed	3-Year T-Note M2023 Future	-60.00	105.81
2023-05-01 16:25:13.000	0.00	Order 'DB_1_01' Executed	3-Year T-Note M2023 Future	-60.00	105.81
2023-05-01 16:25:15.000	2,000.00	Order 'DB_1_03' Cancelled	2-Year T-Note M2023 Future	2,000.00	0.00

5 rows loaded. Last Update: 2023-05-31 15:31:02 UTC

1. The trader entered their spoof order at 16:25:07. Over the next 8 seconds, their genuine sell order was filled.
2. Once their sell order had cleared, 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 **\$976.40**.

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 buy order for 2,000 2-year T-Note futures contracts exerted upwards pressure on the price from which their resting sell order in 3-year T-Note futures contracts benefitted. It derives its USD Value score for the instance by considering both the benefit to the sell order and the hypothetical cost of having to unwind his large spoof order. This lets it prioritise the most serious instances 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.

Although the trader had a sell order in 3-year T-Note futures, they used a spoof buy order in 2-year T-Note futures to imbalance the market. To detect cross-product abuse of this nature, MAST recognises that the value of each T-Note future 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.



tradinghub.com/MAST



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