Market Abuse Case Studies

Primary Market Manipulation

- **ASIC vs Westpac** – Case pending April 2024 – Alleged pre-positioning ahead of a series of interest rate swap transactions to support a prestige transaction, a partial privatisation of NSW's national grid.

- **CFTC v Mizuho Americas April 2023** – Deal Contingent FX Forwards – Manipulation took place on the screen price.

- **CFTC vs HSBC – April 2023** – Manipulating swap spreads on screen to influence the pricing of issuer swaps.

- **CFTC vs John Patrick Gorman III** - Alleged manipulation of the pricing of issuer swap.

‡ TradingHub

Market Abuse Case Studies

WestPac Primary Market Manipulation

Market Abuse Case Study No: 001	Name: WestPac Banking Corporation
Offence: Front running and insider trading in interest rate derivatives and swaps	Detection Control: Front Running V2 (Deal Specific Facilitation)

✛ TradingHub

WestPac Primary Market Manipulation

Overview

On the 5th May 2021, the Australian Securities and Investment Commission (ASIC) filed an application with the Federal Court of Australia claiming that on the 20th October 2016, WestPac entered into hundreds of transactions (876) in various Australian dollar Interest Rate Derivatives (IRDs) hours before trading c. AUD 12bn of interest rate swaps with a Special Purpose Vehicle (SPV) being used by a consortium of investors for the purchase of a majority stake in AusGrid (the "Swap Deal").

AusGrid is an electricity distribution company with 1.8 million customers in New South Wales, and the purpose of the interest rate swaps were to hedge floating rate interest rate payments due on loans borrowed by the SPV to part fund the AUD 16.2bn acquisition of 50.4% of AusGrid sold in a part-privatisation by the Government of New South Wales.

The application claims that WestPac took advantage of inside information relating to the AusGrid part-privatisation when trading the various IRDs in advance of the Swap Deal with and without the consortium's knowledge.

ASIC's grounds for proceedings

There are three critical grounds to ASIC's proceedings which are that:

- WestPac committed 876 cases of insider trading because it possessed inside information relating to the AusGrid transaction and took advantage (without the consortium's consent or knowledge) of this information via 876 IRD transactions.

- WestPac's 876 IRD transactions likely influenced the execution price of the Swap Deal (contravening 12CB of the ASIC Act).

- WestPac did not do all things to ensure that the Swap Deal was executed efficiently, honestly, and fairly (contrary to section 912A of the Corporations Act).

Transaction details & alleged harm

The Swap Deal comprised of 11 interest rate swaps totalling c. AUD 12bn in notional amortising over a 10-year period. These swaps involved WestPac paying a floating rate in return for a fixed rate from the consortium's SPV. The purpose being to transform the consortium's debt servicing costs on syndicated debt funding into fixed cashflows.

Prior to execution, WestPac had agreed with the consortium's SPV to price the swap deal using a formula that referenced the prevailing market levels of related financial products plus an execution margin.

The goal of the formula was to ensure that the price of the Swap Deal occurred at a level consistent with market levels prevailing at

the precise time that the Swap Deal was executed (10:27 am AEST). Furthermore, it incorporated an execution margin to cover WestPac's hedging costs and a reasonable profit on the transaction.

It is alleged that WestPac began to hedge the Swap Deal before it had been priced and executed via the 876 IRDs. These IRDs comprised of:

- Sells of 692 Australian government bond futures contracts (totalling AUD 3.59bn 3-year & AUD 818.9m 10-year contracts).

- Sells of 128 Australian dollar 90-day interest rate futures contracts (totalling AUD 6.109bn and expiring in Sep '17, Dec '17, Mar '18 and Sep '18).

- 35 Exchange for Physicals (EFPs) transactions where an aggregate of AUD 3.98bn of short positions in Australian government bond futures were exchanged for 3, 5 & 10-year Australian dollar interest rate swaps (WestPac paying fixed vs. receiving floating).

- 21 Australian dollar 6s3s tenor basis swaps totalling AUD 2.075bn in 5, 7 & 10-year maturities.

These transactions were executed between 8:30 am & 10:27 AEST and appear to have been designed to hedge up to 50% of the interest rate risk originating from the cash flows of the Swap Deal. It is alleged that the market moved detrimentally to the consortium as a direct result of this pre-hedging, and consequently, the quoted rate and execution price of the Swap Deal were subsequently fixed at a worse price to the consortium (and a better price for WestPac) than would otherwise have occurred.

Detecting Primary Market Manipulation in MAST
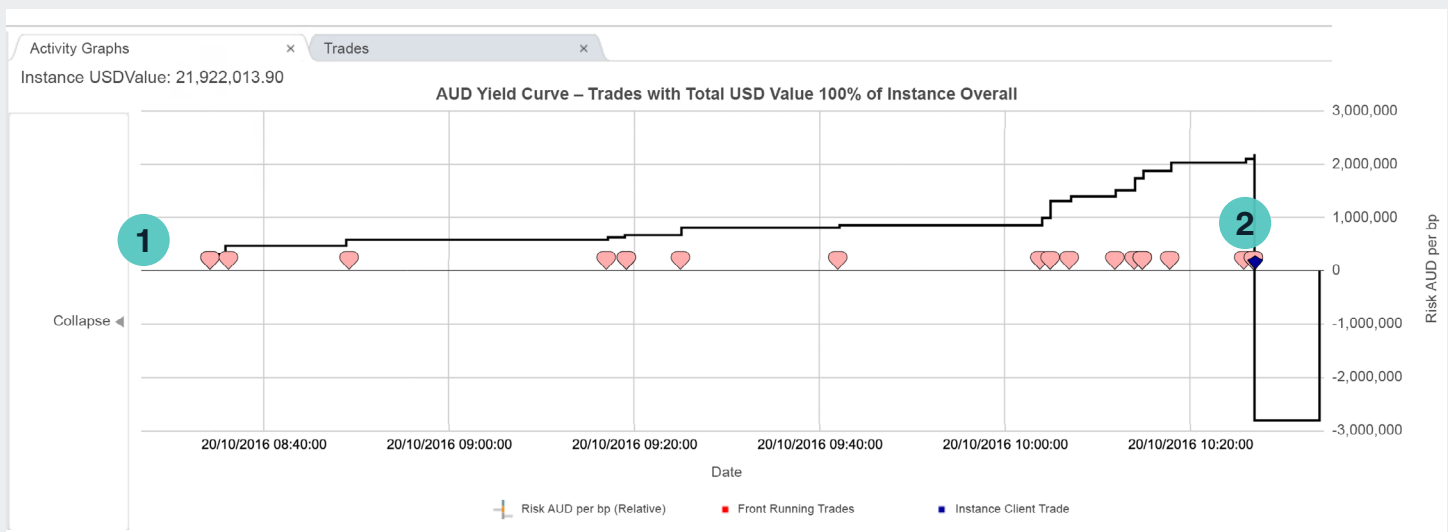
This scenario has been calculated and run through MAST. The graph screenshot shows how MAST illustrates the changing risk position within the instance.

1. The line graph and associated red markers show the build-up of the interest rate risk position from the bond futures trades during the pre-hedging activity.

2. The consortium trade is highlighted by a blue diamond and shows a corresponding fall in the interest rate risk position when the Swap Deal is executed at 10.27 am AEST.

Show Relevant Trades ⬤ Show All Trades

⚙ Trade Date	⚙ Client Instrument ID	⚙ USDValue ❓ ▼	⚙ Trade Designation ❓	⚙ Amount
20/10/2016 08:34:00	AUD 3Y Bond Future	2,833,229.40	WestPac Trades	600,000,000
20/10/2016 08:34:00	AUD 3M Bond Future	87,181.72	WestPac Trades	2,000,000,000
20/10/2016 08:34:00	AUD 3M Bond Future	28,729.37	WestPac Trades	664,000,000
20/10/2016 08:34:00	AUD 3M Bond Future	85,893.28	WestPac Trades	2,000,000,000
20/10/2016 08:36:00	AUD 3Y Bond Future	1,841,148.10	WestPac Trades	500,000,000
20/10/2016 08:49:00	AUD 10Y Bond Future	1,395,923.49	WestPac Trades	100,000,000
20/10/2016 08:49:00	AUD 3M Bond Future	3,401.93	WestPac Trades	109,000,000
20/10/2016 09:17:00	AUD 10Y Bond Future	154,603.51	WestPac Trades	10,000,000
20/10/2016 09:19:00	AUD 10Y Bond Future	303,257.26	WestPac Trades	20,000,000
20/10/2016 09:19:00	AUD 10Y Bond Future	480,362.22	WestPac Trades	33,600,000
20/10/2016 09:25:00	AUD 3Y Bond Future	1,930,569.94	WestPac Trades	500,000,000
20/10/2016 09:42:00	AUD 3M Bond Future	118,161.83	WestPac Trades	1,336,000,000
20/10/2016 10:04:00	AUD 3Y Bond Future	3,229,274.57	WestPac Trades	490,200,000
20/10/2016 10:05:00	AUD 3Y Bond Future	4,246,773.81	WestPac Trades	999,900,000
20/10/2016 10:05:00	AUD 3Y Bond Future	300.18	WestPac Trades	100,000
20/10/2016 10:07:00	AUD 10Y Bond Future	558,948.51	WestPac Trades	69,100,000
20/10/2016 10:12:00	AUD 10Y Bond Future	755,293.15	WestPac Trades	100,000,000
20/10/2016 10:12:00	AUD 10Y Bond Future	108,576.73	WestPac Trades	15,400,000
20/10/2016 10:14:00	AUD 10Y Bond Future	1,277,736.66	WestPac Trades	200,000,000
20/10/2016 10:15:00	AUD 10Y Bond Future	284,135.45	WestPac Trades	50,000,000
20/10/2016 10:15:00	AUD 10Y Bond Future	271,364.89	WestPac Trades	50,000,000
20/10/2016 10:15:00	AUD 10Y Bond Future	109,539.97	WestPac Trades	20,800,000
20/10/2016 10:18:00	AUD 3Y Bond Future	1,078,032.75	WestPac Trades	500,000,000
20/10/2016 10:26:00	AUD 10Y Bond Future	254,155.61	WestPac Trades	50,000,000
20/10/2016 10:27:00	AUD 10Y Bond Future	247,327.78	WestPac Trades	50,000,000
20/10/2016 10:27:00	AUD 10Y Bond Future	238,091.79	WestPac Trades	50,000,000
20/10/2016 10:27:05	Swap Deal	21,922,013.90	Consortium Trade	- 11,931,000,000

The trade screenshot shows how MAST illustrates the critical trading activity within the instance.

1. The trader sold bond future transactions throughout the morning up until the Swap Deal execution time.

2. The Swap Deal was executed at 10.27 am AEST using the prevailing market levels during the pricing window.

3. MAST calculated the impact of each alleged front running trade and assigned a total instance USD value of $21,922,013.90.

How MAST recognises Primary Market Manipulation

Where pre-hedging of a customer order is not permitted (for example, a related transaction in a primary market deal), MAST analyses the trader's activity prior to the execution of the customer's order. MAST uses its Market Impact Model (MIM) and General Market Model (GMM) to determine and quantify whether the trader's activity is likely to have affected the market and corresponding execution price of the customer order.

Where the trader's activity is expected to have affected the order execution price, MAST will express the gain to the trader as a USD Value. An alert will be generated when the materiality score (USD Value) exceeds a pre-set threshold amount.

MAST's market impact and general market models evaluate cross-product market impact (meaning that the impact of futures trades on swap market prices is covered). Furthermore, evaluation of the market impact on the customer's order considers the timing and size of trades.

Market Abuse Case Studies

Mizuho Primary Market Manipulation

Market Abuse Case Study No: 002	Name: Mizuho Capital Markets LLC
Offence: Primary Market Manipulation in Deal Contingent FX Forwards	Detection Control: Front Running V2 (Deal Specific Facilitation)

✕ TradingHub

Mizuho Primary Market Manipulation

Overview

On the 25th of April 2023, the CFTC filed details of proceedings against Mizuho Capital Markets LLC relating to multiple (at least 13) instances of pre-hedging customer trades without disclosure to the customer.

In each case, the customer transactions were deal-contingent FX forward ("DCFX") transactions, which Mizuho pre-hedged (without disclosure) in the minutes and seconds before quoting (and subsequently trading) the customer trade. The CFTC allege that on these occasions, a Mizuho salesperson advised a Mizuho trader that the client was calling to execute the DCFX forward. The trader then immediately started hedging Mizuho's anticipated exposure. In so doing, the Mizuho trader often traded through multiple price levels before Mizuho provided the spot exchange rate to the client.

Mizuho did not disclose to the client that they engaged in this activity that contributed to moving the spot exchange rate in the relevant currency pair against the client. As such, the client may have entered into the DCFX forward at a less favourable rate. At the same time, Mizuho was able to hedge its exposure at a better rate. These transactions occurred from around June 2018 to at least December 2020.

In response to the proceedings, Mizuho made an Offer of Settlement, which the CFTC has decided to accept.

CFTC's grounds for proceedings

The CFTC considers that Mizuho's activity is in breach of multiple subsections of Section 4s(h) of the Commodity Exchange Act and multiple Commission Regulations.

In particular, the CFTC focuses on the failure of Mizuho to disclose pre-hedging to the customer and considers that this violated the legal and regulatory requirements that swap dealers:

- Disclose material information in a manner reasonably designed to allow a counterparty to assess the material incentives and conflicts of interest that the swap dealer may have (in connection with a particular swap).
- Communicate with any counterparty in a fair and balanced manner based upon principles of fair dealing in good faith.
- Diligently supervise its business as a swap dealer.

Transaction Details & Alleged Harm

The CFTC has decided to accept Mizuho's Offer of Settlement and has not published precise details of Mizuho's trading activity. However, the CFTC has described the nature of the abuse that took place.

In each of the 13 cases, Mizuho's client was involved in a cross-border transaction which typically involved the purchase or sale of a portfolio company. The purchase or sale would involve Mizuho's client paying or receiving a large sum of foreign currency at the close of the transaction. To provide the funds in foreign currency (for a purchase) or repatriate funds received into local currency (for a sale) Mizuho's client required a deal-contingent FX forward.

A DCFX transaction is required to hedge against FX market movements for the period up until deal closure whilst protecting against factors resulting in the cancellation such as unsuccessful regulatory approval.

Due to the size and deal-contingent nature of a DCFX transaction, the dealer and client usually agree a pricing methodology to be applied prior to trade execution. This methodology would typically involve a pricing call where the prevailing market FX rate would be observed and a premium is then added to account for the dealer's profit, hedge costs and risk of deal cancellation.

The CFTC alleges that Mizuho pre-hedged (without disclosure and agreement of the client) some or all of the risk related to 13 DCFX cases. This pre-hedging harmed the customer because the act of pre-hedging significant size in the FX market moved the prevailing FX rate against the customer (and made additional profits for Mizuho). Furthermore, the CFTC alleges that such pre-hedging without disclosure breaches the Commodity Exchange Act and Commission Regulations as described in the prior section.

Detecting Primary Market Manipulation in MAST

Whilst the CFTC has not published specific trade details, we have created an example case based on available information and analysed the case in MAST. The graph screenshot shows how MAST illustrates the changing risk position within the instance.
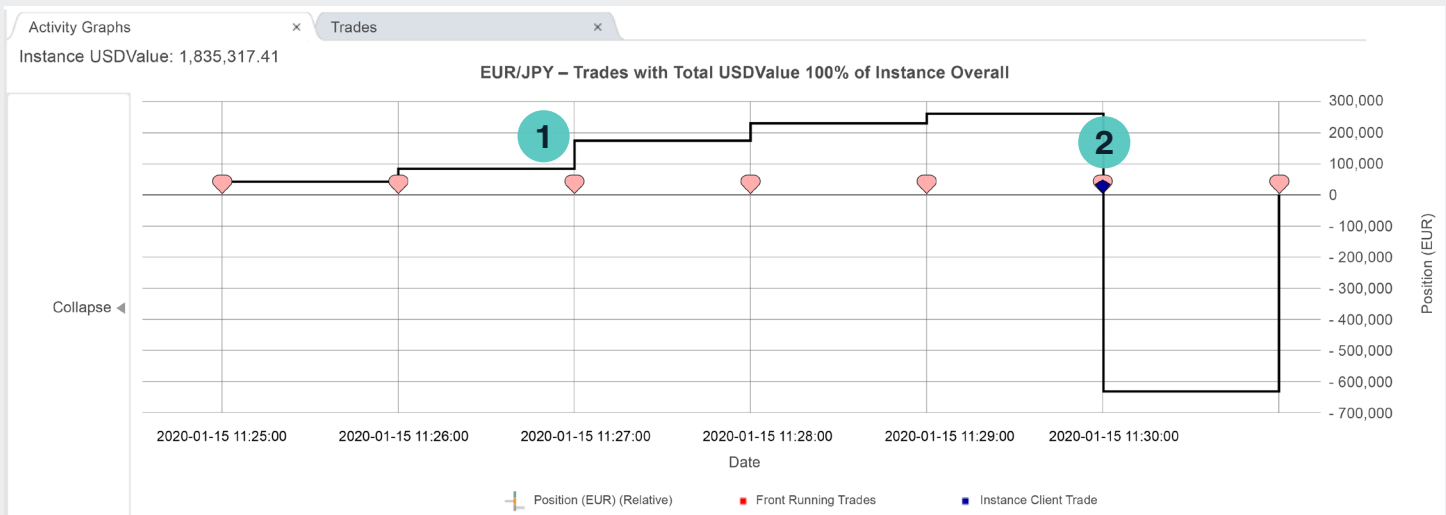
1. The line graph and associated red markers show the trading activity prior to the execution call.

2. The victim trade is highlighted by a blue diamond and shows a corresponding decrease in the EUR position when the deal-contingent FX forward is executed.

	Trade Date	Client Instrument ID	USDValue ⌄	Trade Designation	Amount (Base)	Amount (Quoted)
	2020-01-15 11:25:00	Buy EUR, Sell JPY	387,654.76	Front Running	100,000,000.00	-11,806,237,645.51
	2020-01-15 11:26:00	Buy EUR Sell JPY	377,742.02	Front Running	100,000,000.00	-11,806,237,645.51
1	2020-01-15 11:27:00	Buy EUR, Sell JPY	366,494.49	Front Running	100,000,000.00	-11,806,237,645.51
	2020-01-15 11:28:00	Buy EUR, Sell JPY	356,147.88	Front Running	100,000,000.00	-11,806,237,645.51
	2020-01-15 11:29:00	Buy EUR, Sell JPY	347,278.26	Front Running	100,000,000.00	-11,806,237,645.51
2	2020-01-15 11:30:00	Sell EUR, Buy JPY	1,835,317.41 **3**	Instance Client	- 2,000,000,000.00	236,124,752,910.17

The trade screenshot shows how MAST illustrates the key trading activity within the instance.

1. The front-running trades show trading in the minutes running up to the deal-contingent FX forward. The fact that Mizuho was engaging in this trading activity was not disclosed to the customer.

2. The deal-contingent FX forward spot rate is agreed in an execution call based on the prevailing FX rate.

3. MAST calculated the harm from the market impact of the front running trades on the deal-contingent FX forward and assigned a USDValue of $1,835,317.41.

TradingHub

www.tradinghub.com

How MAST recognises Primary Market Manipulation

Where pre-hedging of a customer order is not permitted (for example, a related transaction in a primary market deal), MAST analyses the trader's activity prior to the execution of the customer's order. MAST uses its Market Impact Model (MIM) and General Market Model (GMM) to determine and quantify whether the trader's activity is likely to have affected the market and corresponding execution price of the customer order.

Where the trader's activity is expected to have affected the order execution price, MAST will express the gain to the trader as a USD Value. An alert will be generated when the materiality score (USD Value) exceeds a pre-set threshold amount.

MAST's market impact and general market models evaluate cross-product market impact (meaning that the impact of futures trades on swap market prices is covered). Furthermore, evaluation of the market impact on the customer's order considers the timing and size of trades.

Market Abuse Case Studies

HSBC Primary Market Manipulation

Market Abuse Case Study No: 003	Name: HSBC Bank USA, N.A.
Alleged Offence: Primary Market Manipulation in Issuer Swaps	Detection Control: Front Running V2 (Deal Specific Facilitation)

✛ TradingHub

HSBC Primary Market Manipulation

Overview

On the 12th of May 2023, the CFTC filed details of proceedings against HSBC Bank USA, N.A., which alleges that HSBC engaged in or attempted to engage in multiple cases of market manipulation and deceptive trading practices between March 2012 and 2015.

In each case, the alleged misconduct relates to activity in primary markets, particularly interest rate swaps that HSBC traded with bond issuers.

In response to the proceedings, HSBC made an Offer of Settlement, which the CFTC accepted.

CFTC Grounds for Proceedings

In each case, a bond issuer executed a large interest rate swap with HSBC as a hedge against interest rate movements (an "issuer swap") (thereby swapping fixed interest bond coupon payments into floating rate payments to HSBC). The CFTC asserts that, in each case, HSBC traded in advance of the issuer swap to intentionally move the market price and thereby execute the issuer swap at a more favourable level to HSBC.

The CFTC considers this activity to be a form of market manipulation and is in breach of multiple sections of both the Commodity Exchange Act and Commission Regulations.

Transaction Details and Alleged Harm

The CFTC accepted HSBC's Offer of Settlement and has therefore not published precise details of HSBC's trading activity. However, the CFTC has described the pattern of transactions and alleged harm to the customer that occurred.

The pricing of an issuer swap typically involves a pricing call where traders from the bank providing the issuer swap will quote the current prices of the relevant financial instruments. The prices quoted during the pricing call are then used to determine prices for the bond and the issuer swap.

For a U.S. dollar bond issue and related interest rate swap, the relevant prices include:

- U.S. Treasuries (the yield of an equivalent maturity bond).
- Swap Spreads (differential of the swap rate vs. U.S. Treasury yield of equivalent maturity).
- Basis Swaps (the rate payable on a swap translating Libor of one tenor for another).

The source of the live prices used are pre-agreed and are usually quoted from screens published by broker firms. These screens display prices from the relevant broker firm, and trades executed through the relevant broker firm can affect the prices displayed on the screen.

The CFTC alleges that when HSBC traders sought to manipulate the profitability of issuer swaps, their activity would follow a distinct pattern. First, HSBC's traders would listen in on the pricing call to gauge exactly when HSBC would be quoting the prices of the relevant products. Next, shortly before the crucial moment at which HSBC would be asked to quote the price of the relevant financial product, the traders who were listening into the pricing call would trade with the relevant broker. Their

focus would be on moving the screen price ahead of the moment that HSBC quoted the price to the customer.

The CFTC goes on to describe high-level details of individual cases. In one case, they describe a trader who asked the broker to "sell a billion" and "hit 'em all down" just before he was asked to quote the price of the relevant instrument on the pricing call. The CFTC did not provide details of the relevant instrument where the abuse occurred, but as described previously, relevant instruments include U.S. Treasuries, Swap Spreads and Basis Swaps.

Detecting Primary Market Manipulation in MAST

Whilst the CFTC has yet to publish full trade details, we have created an example case based on information known, and analysed the case in MAST. In this circumstance, 5-year U.S. Treasuries are used to manipulate the price of a $2bn issuer swap with slightly longer maturity. The graph screenshot shows how MAST illustrates the changing risk position within the instance.
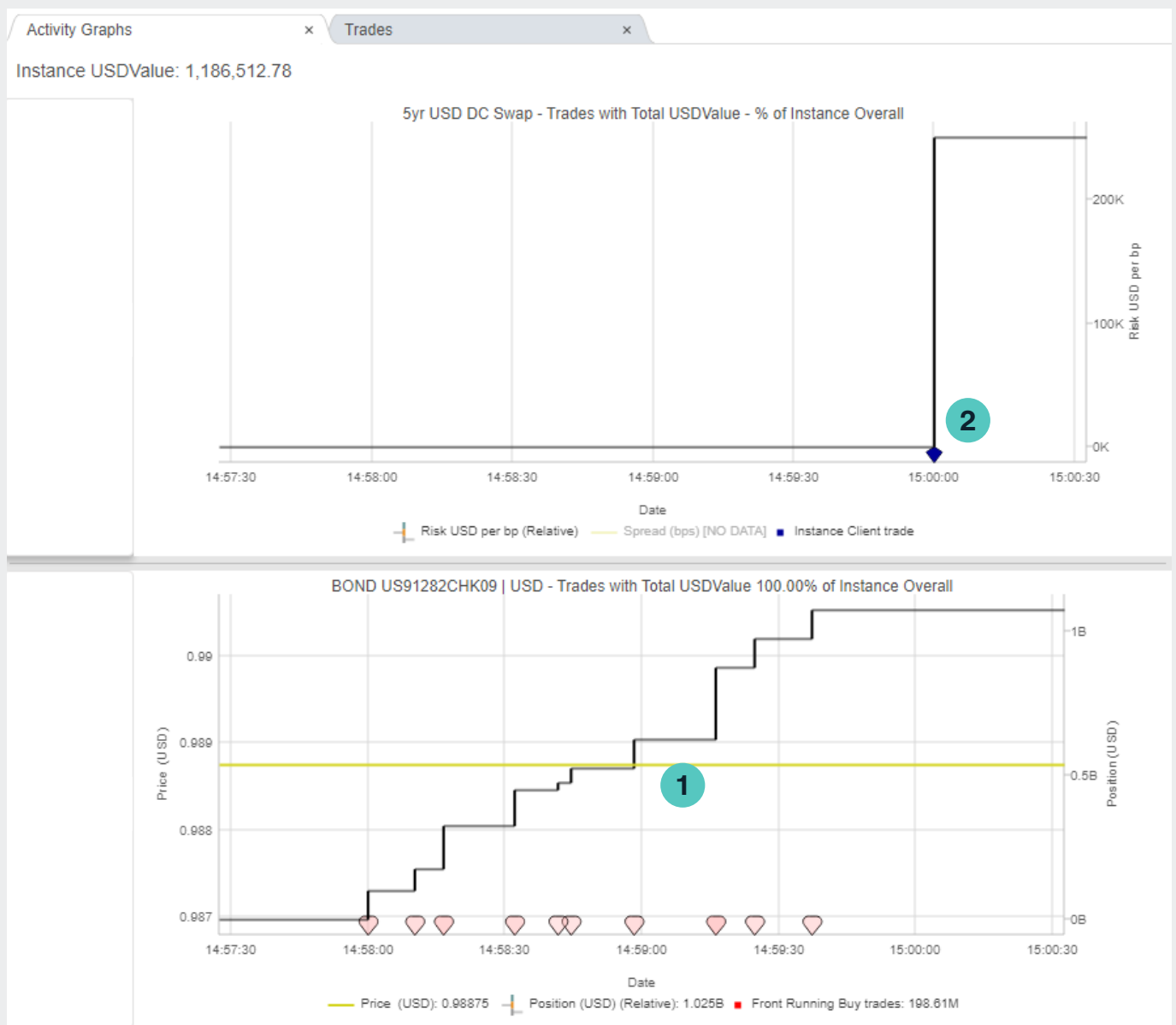
This scenario has been calculated and run through MAST. The graph screenshot shows how MAST illustrates the changing risk position within the instance.

1. The line graph and associated red markers for the trades show the trading activity prior to the execution of the issuer swap.

2. The victim trade is highlighted by a blue diamond when the issuer swap is executed at 15:00:00.

Trade Date	Client Instrument ID	USDValue ⊘ ▼	Trade Designation ⊘	Amount
2023-07-11 15:00:00.000	5yr USD DC Swap	1,186,512.78	Instance Client	-2,500,000,000.00
2023-07-11 14:59:16.158	BOND US91282CHK09 |...	234,234.34	Front Running	250,000,000.00
2023-07-11 14:58:16.522	BOND US91282CHK09 |...	195,503.16	Front Running	150,000,000.00
2023-07-11 14:58:00.000	BOND US91282CHK09 |...	152,302.00	Front Running	100,000,000.00
2023-07-11 14:58:32.103	BOND US91282CHK09 |...	147,050.53	Front Running	125,000,000.00
2023-07-11 14:58:10.234	BOND US91282CHK09 |...	106,846.00	Front Running	75,000,000.00
2023-07-11 14:58:58.254	BOND US91282CHK09 |...	103,838.25	Front Running	100,000,000.00
2023-07-11 14:59:24.670	BOND US91282CHK09 |...	84,264.11	Front Running	100,000,000.00
2023-07-11 14:59:37.236	BOND US91282CHK09 |...	80,130.56	Front Running	100,000,000.00
2023-07-11 14:58:44.469	BOND US91282CHK09 |...	54,435.98	Front Running	50,000,000.00
2023-07-11 14:58:41.604	BOND US91282CHK09 |...	27,907.86	Front Running	25,000,000.00

Show Relevant Trades ⬤ Show All Trades

The trade screenshot shows how MAST illustrates the key trading activity within the instance.

1. Pre-hedging occurred via the purchase of US Treasuries.

2. The issuer swap was executed at 15:00:00.

3. MAST calculated the harm from the market impact of the pre-hedging on the issuer swap and assigned a materiality score of $1,186,512.78.

How MAST Recognises Primary Market Manipulation

Where pre-hedging of a customer order is not permitted (for example, a related transaction in a primary market deal), MAST analyses the trader's activity prior to the execution of the customer's order. MAST uses its Market Impact Model (MIM) and General Market Model (GMM) to determine and quantify whether the trader's activity is likely to have affected the market and corresponding execution price of the customer order.

Where the trader's activity is expected to have affected the order execution price, MAST will express the gain to the trader as a USD Value. An alert will be generated when the materiality score (USD Value) exceeds a pre-set threshold amount.

MAST's market impact and general market models evaluate cross-product market impact (meaning that the impact of futures trades on swap market prices is covered). Furthermore, the evaluation of the market impact on the customer's order considers the timing and size of trades.

Market Abuse Case Studies

John Gorman III - Primary Market Manipulation

Market Abuse Case Study No: 004	Name: John Gorman III
Alleged Offence: Primary Market Manipulation in Bond Issuer Swaps	Detection Control: Front Running V2 (Deal Specific Facilitation)

+ TradingHub

John Gorman III - Primary Market Manipulation

Overview

On the 1st February 2021, the CFTC filed a complaint at the U.S. District Court (Southern District of New York) against John Gorman III, a U.S. dollar swaps trader for Nomura based in Tokyo. The complaint alleges that Gorman engaged in a scheme to deceive and manipulate the price of U.S. dollar interest rate swap spreads to benefit Nomura in an interest rate swap transaction associated with a bond issue (an "issuer swap") that was being priced at the time by Nomura (his employer).

The alleged market abuse occurred shortly after midnight in Tokyo on the 4th February 2015, corresponding to the morning of the 3rd February in New York. On this date, a 10-year $1bn bond issuance was being priced together with a related interest rate swap that the bond issuer had agreed to transact with Nomura.

The pricing methodology/formula for the interest rate swap had already been agreed and would be based upon the prevailing price of 10-year U.S. dollar swap spreads. Furthermore, a particular pricing screen (the "19901" screen) of a Swap Execution Facility ("SEF") was to be used to reference the prevailing 10-year swap spreads price. This screen showed live prices, and it was agreed that during a pricing call (where the swap rate would be set), Gorman would communicate the live swaps spread price from this screen. The CFTC alleges that Gorman manipulated this price (the 10-year swaps spread) on the 19901 screen via multiple swap spreads transactions in the minutes and hours prior to the call.

Transaction Details and Related Comms

The CFTC's allegations are based upon Gorman's pattern of transactions and orders prior to the pricing call and his related communications.

In particular, the CFTC alleges that Gorman made the following trades prior to the swap price fixing, which occurred about 20 seconds after the trade at 1:24 am JST in a pricing call:

- 12:45 am JST: Gorman sold @ 13.25
- 1:13 am JST: Gorman sold @ 13.5
- 1:16 am JST: Gorman sold twice @ 13.5
- 1:20 am JST: Gorman sold @ 13.75
- 1:24 am JST: Gorman sold at 13.5

In each case, the transaction was a 10-year swap spreads trade executed on the same SEF as referenced in the pricing formula (allegedly to achieve the maximum level of price manipulation for the issuer swap fixing). The court filing also indicates sizes of $50m for each individual transaction (where specified). Assuming this size is

roughly applicable to each transaction, this would imply Gorman sold about $300m in 10-year swap spreads prior to the price-fixing of the issuer swap.

In relation to Gorman's communications, the CFTC asserts that these show the clear intent of Gorman to manipulate the issuer swap price fixing. The CFTC highlights various communications, including the following:

- At 12:51 am JST, Gorman told the head of the swaps desk in New York that he thought he could move the screen down to 13.25 ("I will get the print at 13.25").

- At 12:53 am JST, the swaps desk head told Gorman not to "waste too many bullets" – this is not to sell too much – trying to get the price to 13:25 and that there was a "solid bid for spreads".

- In response at 1:07 am, JST Gorman said, referring to the upward movement of the market, which was unfavourable to the bank, "I hate pricing these when momentum is against us. Takes all the fun out of it".

The Alleged Harm

During the alleged market manipulation period, the CFTC describes how the market in 10-year swap spreads moved higher (from 13bps to 13.75bp), with the issuer swap price fixing occurring when the market was at 13.5bps. The increase in the market price happened despite the c. $300m of 10-year swap spreads that Gorman sold (due to the significant amount of buying interest at the time from the rest of the market).

It is, therefore, unclear if Gorman's was successful in moving the price in Nomura's favour and to what extent. One estimate is that he managed to move the market 0.25bps lower (as the market was 13.75 right before his final trade, and the price fixing occurred immediately after using a 13.5bps reference price).

As the 10-year issuer swap would have had a DV01 slightly below $1m per bp, every 0.25bps of price manipulation would have benefited Nomura by approximately $250k in P&L at the detriment of the issuer.

However, the CFTC's case relies not on whether Gorman was successful but rather on his intent. They assert that he is guilty of market manipulation because his trading activity and communications show a clear intent to commit market manipulation.

Detecting Primary Market Manipulation in MAST
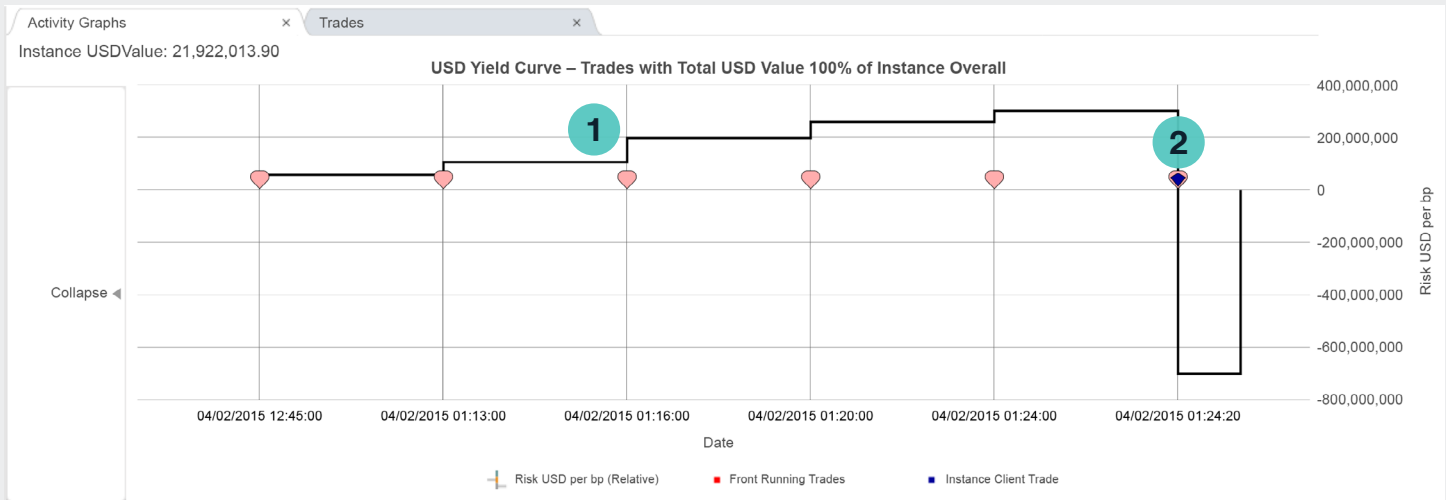
This scenario has been mocked up and run through MAST. The graph screenshot shows how MAST illustrates the changing risk position within the instance.

1. The line graph and associated red markers show the build-up of the interest rate risk position trading activity prior to the pricing call.

2. The victim trade is highlighted by a blue diamond and shows a corresponding fall in the interest rate risk position when the issuer swap is executed at 01:24:20 JST.

Trade Date	Client Instrument ID	USDValue ▼	Trade Designation	Amount
04/02/2015 12:45:00	USD 10Y Swap	5,944.70	Front Running	50,000,000
04/02/2015 01:13:00	USD 10Y Swap	32,342.18	Front Running	50,000,000
04/02/2015 01:16:00	USD 10Y Swap	107,773.84	Front Running	100,000,000
04/02/2015 01:20:00	USD 10Y Swap	54,571.55	Front Running	50,000,000
04/02/2015 01:24:00	USD 10Y Swap	57,174.70	Front Running	50,000,000
04/02/2015 01:24:20	Issuer Swap	257,806.97	Instance Client	-1,000,000,000

The trade screenshot shows how MAST illustrates the key trading activity within the instance.

1. The trader executed five trades prior to the swap price fixing which exerted downward pressure on the rate used for the swap price fixing.

2. The swap price fixing occurs at 01:24.20 JST using the price visible on the live screen.

3. MAST calculated the harm from the market impact of the front running trades on the issuer swap and assigned a USDValue of $257,806.97.

How MAST recognises Primary Market Manipulation

Where pre-hedging of a customer order is not permitted (for example, a related transaction in a primary market deal), MAST analyses the trader's activity prior to the execution of the customer's order. MAST uses its Market Impact Model (MIM) and General Market Model (GMM) to determine and quantify whether the trader's activity is likely to have affected the market and corresponding execution price of the customer order.

Where the trader's activity is expected to have affected the order execution price, MAST will express the gain to the trader as a USD Value. An alert will be generated when the materiality score (USD Value) exceeds a pre-set threshold amount.

MAST's MIM & GMM models evaluate cross-product market impact (meaning that the impact of futures trades on swap market prices is covered). Furthermore, evaluation of the market impact on the customer's order considers the timing and size of trades.

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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