Market Abuse Case Studies

HSBC Primary Market Manipulation

Name: HSBC Bank USA, N.A.
Detection Control: Front Running V2 (Deal Specific Facilitation)

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Market Abuse Case Study No: 003

Name:

HSBC Bank USA, N.A.

Civilian Authority:

Commodity Futures Trading Commission (CFTC)

Alleged Offence:

Primary Market Manipulation in Issuer Swaps

Detection Control:

Front Running V2 (Deal Specific Facilitation)

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.



	Show Relevant Trades Show All Trades					
	≃ Trade Date	Client Instrument ID	⇒ USDValue ▼	☆ Trade Designation ◎	≃ Amount	
	2023-07-11 15:00:00.000	5yr USD DC Swap	3 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	
1	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	

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

- 1. Pre-hedging occurred via the purchase 2. The issuer swap was executed of US Treasuries.
 - 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 order execution price exceeds a preset threshold amount.

MAST's market impact and general market models evaluate crossproduct 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.

Advance your surveillance function

Improve your detection of market abuse, reduce false positives and prioritise high-risk alerts.

Reach out to learn more.

tradinghub.com/MAST

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