

Alleged market manipulation and the pre-hedging of large trades

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Pre-hedging, or anticipatory hedging, is one of many risk management tools often used in principal-based OTC markets, such as commodities, foreign exchange (FX), or interest rate swap markets. It refers to trading conducted on a principal basis, often by a broker-dealer, to mitigate the inventory risk of a position before the order that gives rise to that position has been executed or finalized.

The trading at issue may actually be consistent with a dealer's desire to manage its risk exposure by pre-hedging.

This practice has recently drawn the attention of industry participants and regulators, even though appropriate pre-hedging has been recognized as part of industry practice for prudent risk management.¹

In particular, recent developments have brought to the forefront the challenges associated with distinguishing between legitimate risk management practices and potentially manipulative conduct in the context of pre-hedging.

The Commodity Futures Trading Commission (CFTC) has reported a number of enforcement actions in which it alleged that dealers were trading for their own benefit and manipulating markets in anticipation of a pricing event for a

large transaction with a counterparty that will be priced by referencing those same markets.²

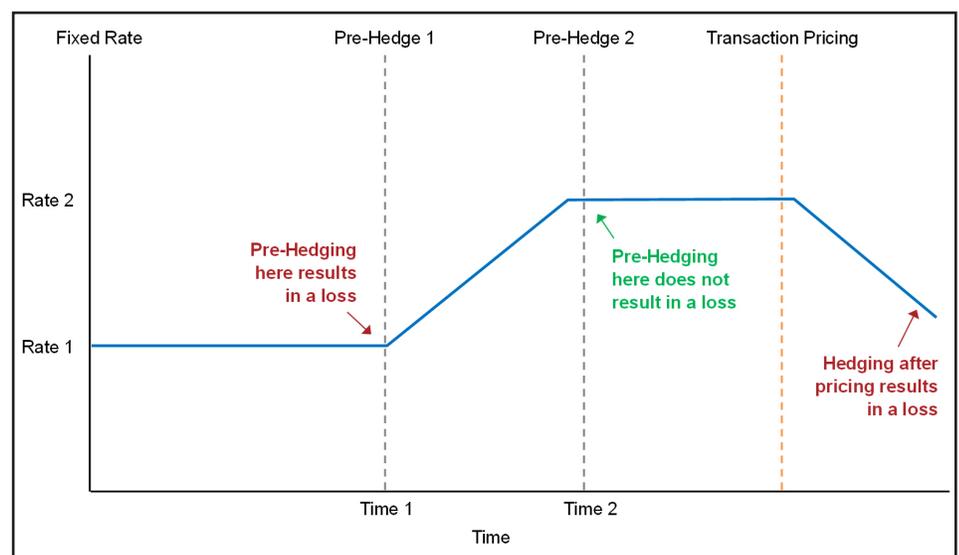
Similar concerns related to dealers' trades in advance of transactions with counterparties have been raised in academic research, in a recent complaint against HSBC Securities by a former trader, and by the European Securities and Markets Authority in its evaluation of acceptable conduct when dealers receive requests for quotes from counterparties, among others.³

In many of these instances, the trading at issue may actually be consistent with a dealer's desire to manage its risk exposure by pre-hedging, and distinguishing between potentially manipulative conduct and appropriate risk management requires a careful review and rigorous economic analysis of the evidence.

Consider an example where a dealer enters into an interest rate swap with a counterparty as a payer, that is, the dealer will pay the fixed rate of the swap and receive a floating rate payment (this is equivalent to having a long exposure to interest rates, in which the dealer benefits from higher interest rates).

The dealer could be exposed to the risk of the value of the transaction changing as interest rates move after the pricing of the deal is determined. This risk can be offset by entering into offsetting swaps in the interdealer market. Further, from the perspective of the dealer, generally the closer the dealer hedges to the time of pricing, the lower the risk.

To see why, consider the simplified diagram below, which shows a hypothetical movement in interest rates around the time of the transaction pricing.



If the dealer pre-hedges its exposure at Time 1 by entering swaps as a fixed rate receiver, it will incur a loss as interest rates go up, meaning it will have to pay a higher fixed rate in the swap (Rate 2) with the counterparty than it receives on its hedge (Rate 1).

If the dealer waits until after the transaction was priced to start hedging (i.e., if it does not engage in pre-hedging at all), it will also experience losses as prices moved against the position it obtained from the trade with the counterparty.⁴ Those losses can be substantial, especially when the position to be hedged is large relative to the liquidity of the market.

If the dealer pre-hedges at Time 2, however, it will be able to hedge its exposure at the same level (Rate 2) at which the transaction with the counterparty will ultimately occur, thereby offsetting its risk. The closer in time to the pricing event the dealer can execute its hedges, the smaller the risk of adverse market movements. This is why the dealer wants to pre-hedge its exposure as closely as possible to the time of pricing of the underlying transaction.⁵

However, note that the dealer needs to enter into swaps as a fixed rate receiver in order to pre-hedge its exposure. If these transactions are large enough relative to market liquidity, executing this pre-hedge might drive down the rates quoted in the market.

In other words, the dealer's trades are in a direction that can result in an adverse price movement from the perspective of the counterparty. Those trades can thus result in a market price that appears less favorable, from the perspective of the counterparty, than would have prevailed before the pre-hedging.⁶

However, as will be discussed below, evaluating the economics of pre-hedging needs to consider holistically the price a counterparty receives. Executing any large order (by a dealer or by the client itself), especially in a less liquid OTC market, is likely to generate price impact, which is sometimes referred to as "slippage." Allowing dealers to pre-hedge could potentially result in a reduction of price

impact by lengthening the total hedging/trading window.

Further, through pre-hedging, dealers can test market liquidity and engage in price discovery in a relatively illiquid OTC market, which in turn may reduce total hedging costs and allow the counterparty to negotiate more favorable terms.⁷

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Nonetheless, because of the concern on pre-hedging's market impact, the CFTC and other regulators have raised concerns that certain trading in anticipation of a transaction with a counterparty can be manipulative.

A careful and detailed analysis is required to distinguish between potentially manipulative conduct and appropriate pre-hedging that serves legitimate business purposes. While the actual analyses will depend on the specific circumstances of each case, several factors are typically considered by regulators.

First, is the amount traded for purposes of pre-hedging consistent with the risk exposure that is being obtained through the transaction that is being hedged? Pre-hedging does not always fully offset the risk of the transaction, and some residual risk can remain that may be hedged after the transaction with the counterparty.

If, on the other hand, the risk traded prior to the pricing of the transaction is larger than the risk obtained through it, it may raise concerns for the regulator that the intent of trading was manipulative.⁸

Second, the degree to which the dealer manages the effect its executions have on prices — often called the "price impact" of the trades — can also be seen as important. A dealer seeking to pre-hedge a position

may attempt to mitigate the impact on prices from its trades by, among other things, choosing platforms/markets with more liquidity, following a more patient execution strategy, and/or minimizing aggressive trading close to the pricing of the transaction.⁹

However, the dealer needs to balance the desire to minimize any potential price impact against any increased risk that these mitigation measures may bring, a tradeoff that is informed by market conditions and characteristics. A slow and passive execution strategy may help mitigate price impact, but may not allow for trading in sufficient amounts close to the time when the transaction with the client is priced/finalized, thereby making the dealer more exposed to the risk of adverse price fluctuations.¹⁰

Assessing this balance is highly dependent on the facts and circumstances at issue. What is a patient and appropriate pre-hedging strategy in one case may expose the dealer to inappropriate levels of risk in a different situation (e.g., when trading a volatile and illiquid asset).

Price impact is sometimes unavoidable, especially when pre-hedging large positions, and is not, on its own, evidence of market manipulation or attempted manipulation.

However, if the dealer trades in an uneconomic way that appears designed to *exacerbate* its impact on market prices, it may raise concerns and attract additional scrutiny from regulators.¹¹ Rigorous economic analysis of risk exposure, expected price impact, and possible market prices in the absence of certain trades can help distinguish between legitimate and potentially manipulative conduct.

Third, there are other considerations that can be important to regulators. For example, the extent to which the dealer has written procedures on and discloses its pre-hedging practices to counterparties — and the consistency between those disclosures and its trading patterns — can be seen as helpful in establishing that pre-hedging is standard in the market and accepted by the parties involved as something that enables the dealer to offer transactions to its counterparties (or offer them at a competitive price).¹²

All in all, it appears likely that the practice of pre-hedging large transactions by dealers may remain controversial and subject to scrutiny by regulators and counterparties in the foreseeable future. Dealers have an incentive to trade out of at least part of their risk exposure prior to, but close to, the pricing of a large transaction to mitigate their risk exposure and to ensure that the level observed in the market is reflective of actual trading.

However, those same trades can give rise to concerns that the market is being manipulated to the disadvantage of counterparties. Rigorous, academically grounded empirical analyses on the factors outlined above can be helpful in distinguishing between potential manipulative conduct and appropriate risk management.

Notes

¹ See, e.g., “Call for Evidence on Pre-Hedging,” European Securities and Market Authority, July 29, 2022, p. 10; Global Foreign Exchange Committee, “FX Global Code,” FX Global Code, July 2021 (“FX Global Code”), p. 17; FICC Markets Standards Board, “Standard for Execution of Large Trades in FICC Markets,” pp. 8–9. This is different from “hedging” in general, which refers to trading to manage risk after the market risk has been transferred to the dealer.

² See, e.g., Complaint, *CFTC v. John Patrick Gorman III*, No. 1:21-cv-00870, filed February 1, 2021; Complaint, *CFTC v. Christophe Rivoire*, No. 1:19-cv-11701, filed December 20, 2019. The alleged actions at issue can be seen as falling under the classification of front running. The CFTC defines front running as “taking a futures or option position based upon non-public information regarding an impending transaction by another person in the same or related future or option” (CFTC Guide to the Language of the Futures Industry). In these actions the CFTC alleges that the trader attempted to impact the pricing of the transaction the dealer was entering into with a counterparty. In more

common front-running allegations, the main concern is that the dealer is trading on the basis of material nonpublic information and/or attempting to benefit from the impact of the counterparty’s trade on prices, particularly if the dealer is acting as an agent of the counterparty (i.e., not in a principal capacity). See also FINRA, “5270. Front Running of Block Transactions,” FINRA Rules, September 3, 2013; ICE Futures U.S., “Is Pre-hedging or Anticipatory Hedging of a Block Trade Permitted?,” ICE Futures U.S. Block Trade — FAQs, June 13, 2022.

³ Henderson, B. J., N. D. Pearson, L. Wang (2020), “Pre-trade Hedging: Evidence from the Issuance of Retail Structured Products,” *Journal of Financial Economics* 137, pp. 108–128; “How Requests for Quotes Could Amount to ‘Insider Information,’” *Risk.net*, published October 11, 2022; Complaint, *Stephen Callahan v. HSBC Securities (USA) Inc. et al.*, No. 1:22-cv-08621, filed October 11, 2022; “Call for Evidence on Pre-Hedging,” *European Securities and Market Authority*, July 29, 2022, p. 7.

⁴ The risk that the market moves against the dealer after the pricing may be particularly high in cases where there is information leakage.

⁵ It is of course possible that the dealer would earn a profit by pre-hedging earlier or hedging after the transaction if the market had moved in a different direction. However, dealers generally want to minimize their exposure to market risk, earning their profits through bid-ask spreads and the structuring of transactions.

⁶ Economic principles suggest that if a dealer could not pre-hedge its exposure, the costs associated with its greater exposure to risk would be reflected in the price it offered the counterparty (e.g., by charging a higher markup). See, e.g., “Call for Evidence on Pre-Hedging,” *European Securities and Market Authority*, July 29, 2022, p. 12.

⁷ See, e.g., Global Foreign Exchange Committee, “Commentary on Principle 11 and the Role of PreHedging in Today’s FX Landscape,” July 2021, pp. 5–6. The GFCX guidance identifies multiple elements of pre-hedging that potentially contribute to risk reduction, including that a “[l]iquidity provider’s hedging cost is potentially lowered by lengthening the window over which they can hedge the new exposure by permitting transactions before and after the risk transfer takes place” and that “[l]iquidity providers can confirm underlying liquidity conditions by testing market liquidity in the absence of being able to validate

through other sources, including systems and historical data.”

⁸ See, e.g., FICC Markets Standards Board, “Standard for Execution of Large Trades in FICC Markets,” p. 9 (“[Pre-hedging] should be reasonable relative to the size and nature of the anticipated transaction”).

⁹ See, e.g., FX Global Code, p. 17 (“In assessing whether Pre-Hedging is being undertaken in accordance with the principles above, a Market Participant should consider prevailing market conditions (such as liquidity) and the size and nature of the anticipated transaction.”); FICC Markets Standards Board, “Standard for Execution of Large Trades in FICC Markets,” p. 9 (“It should be reasonable relative to the size and nature of the anticipated transaction taking into account prevailing market conditions (such as liquidity) [and it] should aim to minimise the impact of the activity on the market and be designed to facilitate the transaction”).

¹⁰ Note that pre-hedging does not eliminate the exposure to market risk for the dealer as prices can move adversely up until the transaction with the client is priced/finalized. As noted above, generally the closer pre-hedging occurs to the time at which the underlying transaction occurs, the lower the risk the dealer is exposed to.

¹¹ See, e.g., a conceptually related discussion in Onur, E., and D. Reiffen, “The Effect of Settlement Rules on the Incentive to Bang the Close,” *Working Paper*, CFTC, pp. 1–2 (“We show that the incentive to manipulate the reference (or settlement) price is dependent on a trader’s position in that contract, and traders may engage in seemingly uneconomic trades to exert some influence on the settlement price, or what is sometimes referred to as banging the close.”).

¹² See, e.g., FX Global Code, p. 17 (“Market Participants should communicate their Pre-Hedging practices to their Clients in a manner meant to enable Clients to understand their choices as to execution”); FICC Markets Standards Board, “Standard for Execution of Large Trades in FICC Markets,” p. 9 (“Pre-hedging should only be undertaken where the client has been made aware in advance that pre-hedging may take place and could have an impact on the market price of the instrument. The dealer should consider, taking into account factors such as the expertise of the client, the nature of the client relationship and frequency with which the client enters into comparable transactions, whether it is necessary to make such disclosure on a trade-by-trade or other basis”).

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