

To Trade, or Not to Trade?

Enhancing Order Execution in High Volatility

U.S. Equities

As volatility increases in the broader equity markets, market experts have opined that the average cost of trading has also pushed higher. Using a simple trade impact model, this observation can be dissected into two main drivers: the appearance of wider spreads and an increased exposure to higher price volatility. Just by its nature, volatility can be expected to fluctuate over time and also during the course of the trading day. For example, the first hour of the trading day is typically associated with wider than normal spreads and higher than average volatility. The models used to estimate the cost of trading, on average, will produce a much higher trading estimate for that first hour, than for the rest of the day's trading. This phenomenon makes many market participants wary of actively trading during these times. So what should a trade execution trajectory look like during higher volatility periods?

Trade Execution in Periods of High Volatility

When spreads are wider, many hold that it's most advantageous to remain passive. While potentially beneficial, a passive tactic requires awareness of market moves and remaining too passive for too long can result in substantial opportunity cost. On the flip side, market participants may become opportunistic and look for 'favorable' spread-crossing opportunities. When the markets are not showing 'normal' characteristics, it becomes increasingly difficult to identify a truly 'favorable' opportunity. Relying purely on market statistics — most commonly short-term stock statistics — to determine favorable opportunities during high volatility periods is almost always insufficient. Short-term stock statistics can be effective during standard market conditions but this approach alone may fall short when the market is exhibiting higher than 'normal' volatility.

Alternative Approaches

Alternatively some investors may try to improve contra party selection in an attempt to manage order impact in high volatility. This feature is typically provided by Alternative Trading Systems (ATS) via contra party segmentation. The premise behind segmenting contra parties is that different contra parties absorb impact differently. Retail Priority (RP) on Cboe's EDGX Exchange, is an order book mechanism that provides a similar concept, but in a lit market.

Price trajectories for removers when the contra party had a RP order during high volatility typically show a more muted price response from the overall market compared to a non-RP contra party. Figure 2 shows why this price response is meaningful and how it can help in reducing opportunity cost of residual trades. The EDGX marketplace provides a lower impact 'remove' opportunity for participants by increasing the probability of a RP order at the inside. During higher volatility periods, it is imperative to have an efficient mechanism that can periodically cross the spread without fear of an adverse price response. Retail Priority does just that. Enhance your execution quality with Retail Priority. Learn more here.

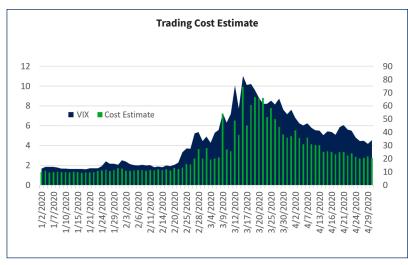


Figure 1 Trading cost¹ and VIX Index trends between January 2020 and April 2020

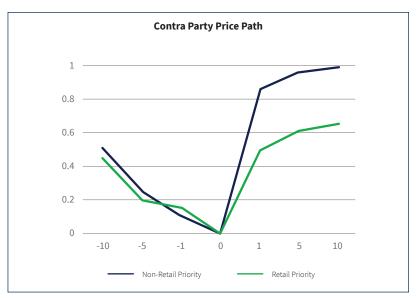


Figure 2 Price Paths Around Trades During High Volatility



¹ J Gatheral No Dynamic Arbitrage and Market Impact, 2010