

Execution Quality Measurements

Fidelity has established a set of standards used to measure our order routing process. Fidelity takes many factors into consideration when routing trades; the most significant criteria are listed below.

Item	Description
Crossing opportunities	A market center's practice to cross pre-opening orders. Fidelity looks to route orders to market centers that internally cross buy and sell orders and to provide crossing opportunities between the National Best Bid or Offer (NBBO).
Exception reporting	A market center's willingness to provide copies of exception reports with follow-up action items. Fidelity has internal exception reports for orders and we expect market centers to provide justification on their identified exceptions.
Financial responsibility	Refers to the market center's financial ability and willingness to "make good" on orders in the event of systems problems on its end, or other factors that affected the execution price. If the market center missed a market that affected the price to the customer, the market center should adjust the price and absorb the financial cost of the adjustment.
Limit orders	Differences may exist in execution quality for limit orders among various market centers. Many marketplaces do a good job of executing market and marketable limit orders, but execution of non-marketable limit orders can vary by market center. This can depend on the security, volume of orders handled by the market center, and how liquid it is, as well as other factors.
Liquidity enhancements	A market center's ability to provide liquidity enhancements including the size of guaranteed auto executions. Liquidity enhancement occurs when a market center executes a greater share quantity of an order than the corresponding displayed size at a given bid or ask. For example, the NBBO on a security is bid 10.21 -- ask 10.25 and there are 100 shares available at the bid and 100 shares available at the ask. In this example, a market center that was able to fill an order for more than the displayed size of 100 shares at either the bid or the ask would be providing enhanced liquidity. Another factor that is important in evaluating liquidity enhancement is guaranteed auto-execution rates. A market center that offers auto execution typically provides, upon receipt, an automatic execution of an order at the NBBO or better to a specified number of shares (usually 300 to 1,000 shares).
Managing in volatile markets	Procedures to handle volatile market situations. The expectation is that all routing destinations have policies and procedures in place to handle order flow during volatile market conditions.
National Best Bid or Offer (NBBO)	A market center's ability to provide executions at or within the National Best Bid or Offer (NBBO). Typically, quotes that customers see through online data services or get through financial representatives represent the best bid or ask for that security among all market centers that trade the security. This is accomplished through the Consolidated Quotations Services

	<p>(CQS), which consolidates quote information from competing market centers. Our expectation is that the market orders and marketable limit orders that we route will receive execution at or within the NBBO. However, certain conditions, such as excessive market volatility or the lack of liquidity in a particular security may impede a broker-dealer's ability to receive an execution at the NBBO. The execution may nevertheless represent the best that was available under prevailing market conditions.</p>
Order handling	<p>Not all market centers have the same areas of expertise when it comes to executing different order types. For example, some market centers do an excellent job executing market orders but are unable to accept stop and limit orders. Fidelity has the ability to route orders to different market centers based on order type when necessary.</p> <p>The Order Flow Management Team is an internal Fidelity group that is separate from our own business units. It has one overriding goal: to find the destination for our customers' orders that will provide the best execution based on the factors described above.</p>
Order routing	<p>Fidelity's ability to send different orders to different market centers for execution. Because markets typically specialize in certain types of securities or in certain types of orders, order routing requires an understanding of the relative strengths and weaknesses of the market centers to which orders are sent for execution. For instance, not all markets centers handle stop orders the same way. Likewise, some markets are better than others at providing executions in less liquid securities.</p>
Price adjustments	<p>The willingness of the market center to adjust price in the event of a missed market. Fidelity maintains internal order execution reporting technology that identifies any orders executed outside the NBBO during the course of a trading day. In some cases executions outside of the NBBO may be warranted based on excessive trade volume on a particular security or market volatility. When they are not warranted, Fidelity will go back to the market center on behalf of our customers and request price adjustments.</p>
Price improvement opportunities	<p>The ability of the market center to provide price improvement opportunities. Price improvement is the practice of providing a better execution price than the quoted NBBO on market and limit orders for listed and over the counter securities. If a customer is buying, price improvement would mean that the order received an execution at a price lower than the displayed national best offer price, and if they are selling, it would mean they received an execution at a price higher than the displayed national best bid price.</p>
Real-time notice	<p>The ability to provide Fidelity with real-time notice of the dealer's disabling of auto-execution systems or reduction in guaranteed execution size. Occasionally, market centers decide to disable their auto-execution systems or reduce guaranteed execution size on orders. Fidelity expects real-time notice when this occurs, to allow Fidelity time to seek alternate routing destinations, when necessary.</p>

Responsiveness	General responsiveness of the firm, including staffing. It is very important to Fidelity that a market center have the ability to research orders at Fidelity's request and respond in a timely manner through price adjustments or follow-up notification.
Speed of order execution	Speed of execution is an important factor in determining where orders are routed, but it is only one factor. Some market centers may provide good speed of execution but fail to provide price improvement or enhanced liquidity. All factors must be weighed when determining routing destinations. Speed of execution is measured from the time a customer's order is received by Fidelity to the time of execution at the market center. It does not factor in the time that it takes for the order execution to be reported back to Fidelity and posted to the order's status.
System reliability	The reliability of a market center's systems is an important factor in determining routing destinations. Fidelity needs to know that market centers can handle the order flow Fidelity may send them, especially in volatile market conditions.