Best Execution: *Defining Best Execution in an Increasingly Complex Trading Environment*

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Defining *best execution* in an increasingly complex trading environment can be tough, and finding two sides that agree on a common definition can be even tougher. Made up of both quantitative and qualitative factors, best execution has been characterized several ways. Many professionals claim best execution is solely determined by price, while others state it is identified by commission cost. As subjective as the term is, it is clear that the meaning of best execution is left up to the individual firm to justify to its clients and the U.S. Securities and Exchange Commission (SEC).

This article addresses the fiduciary responsibility of best execution for buy-side institutional managers and details the practices that it entails. Best execution is more of a process driven by sound policies and procedures than by any single data point. It begins by creating an environment in which best execution can be achieved. Several tools are available to identify the components that define best execution, including the use of transaction cost analysis.

Technology has played a significant role in the ever-changing equity markets and has caused traders to become adaptive in their methods of providing best execution. High-frequency trading (HFT) and market fragmentation have made execution much more difficult. Creating best practices and oversight, combined with an effective use of technology and human capital, are essential tools for organizations that strive to provide best execution for their clients.

DEFINING BEST EXECUTION

Although traders are required to strive for best execution, it has yet to be definitively defined. The SEC states that in deciding how to execute orders,

> your broker has a duty to seek the best execution that is reasonably available. … That means your broker must evaluate the orders it receives from *all* customers in the aggregate and periodically assess which competing markets, market makers, or electronic communications networks (ECNs) offer the most favorable terms of execution.[1]

According to the CFA Institute trade management guidelines, best execution is defined as "the trading process Firms apply that seeks to maximize the value of a client's portfolio within the client's stated investment objectives and constraints" (CFA Institute [2004, p. 5].

The determining factor in best execution is not necessarily the most favorable price point or lowest commission cost, but whether

the transaction represents the best quantitative and qualitative execution for the client's account. It is the environment created by a process in which best execution is most likely to be achieved. Developing effective trading strategies and monitoring execution is an essential step in that process. Determination should be given to the proper execution venue. The possibilities include direct order routing, ECNs, algorithms, or alternative trading systems, such as dark liquidity pools, crossing networks, and aggregators. Traders should consider factors such as price, commission, transaction timing, desired outcome, and current market conditions and trends. In addition, traders should also consider execution capabilities including liquidity, timeliness, clearance, settlement, and responsiveness, as well as the overall financial solvency and risk associated with counterparties.

As technology has redefined the macro trading environment, a firm's commitment to technology as part of its process in defining best execution is essential. Managing the execution tools available to facilitate best execution is a key component in the definition, but those tools are only as effective as the human capital a firm deploys behind it.

The U.S. equity market is in the middle of a fundamental shift as the complexity of regulation, fragmentation, and competition has given more power to the buy side. Historically, a clear separation has existed between the buy side, the sell side, and the exchanges. As traditional exchanges have faced increased competition from third markets, and technology has fueled an evolution of electronic trading venues, buy-side traders have greater control over the best execution process, and with that, greater responsibility.

BEST EXECUTION AND TRANSACTION COST ANALYSIS

One of the tools commonly used to determine best execution is transaction cost analysis (TCA). Transaction cost analysis is viewed as playing a crucial role in meeting best execution requirements and allowing trading desks to refine their processes, but it is not determinative. Used properly, it should measure the effectiveness of trading strategies against various benchmarks, among the most common being volume weighted average price and implementation shortfall (or entry strike price). Transaction cost analysis has grown in usage as increased regulation and greater accountability have forced those not monitoring execution to refocus on fiduciary responsibility. According to the Tabb Group, 90% of traditional asset managers had adopted TCA by the end of 2007 (Jaworski [2008]).

Although TCA has historically been used to analyze equity trading performance, it can also provide a firm with valuable information regarding the portfolio management process. The data offer traders and portfolio managers a detailed analysis of how TCA can be used to change or improve current strategies.

Transaction cost analysis can be used to help manage cost impacts for both trading executions and commissions. It can provide data on how an equity trader performs versus various benchmarks. One criticism of TCA is that the data tend to provide historical information, rather than real-time metrics. As firms embrace technology, however, TCA can be expanded to provide current data that help traders adjust trading strategies in a real-time environment. Data is now available on a tick-by-tick analysis, as well as on a T + 1 basis, which allows trading desks at the forefront of the TCA revolution to monitor performance more closely than in the past.

Not only can TCA provide valuable information on trade executions, it can also provide information on the timing of portfolio management decisions. Transaction cost analysis can be incorporated to analyze the timing of portfolio decisions and quantify the impact on portfolio returns. It is a tool that has proved to be more and more valuable as market volatility has increased over the years. Portfolio managers also benefit from the analysis by gaining a better understanding of the impact from the timing of a decision, and it helps create open dialogue between traders and portfolio managers.

Although TCA is an essential tool in the overall process of defining best execution, it has a downside as well. Transaction cost analysis is great at analyzing the quantitative aspects of effective trading, but it does a poor job of measuring the qualitative aspects that factor into a trading strategy.

HIGH-FREQUENCY TRADING AND THE CASE FOR HUMAN CAPITAL

In November 1999, then–SEC Chairman Arthur Levitt, in a presentation to the Securities Industry Association, claimed that "with more market centers than ever before, the duty of best execution must be

woven more fully into the fabric of our markets" (Levitt [1999]). In the last decade, the U.S. equity market has seen electronic trading evolve to the point where market fragmentation has made it more challenging than ever to manage the best execution process.

Two major events that opened the door for change were the dramatic move to decimalization and the creation of the Regulation National Market System (Reg NMS). The move to decimalization sought to lessen trading costs and enhance liquidity. According to the SEC, Reg NMS was created to foster competition among individual markets and among individual orders in order to promote efficient and fair price formation across securities markets (SEC [2005]). What ensued, however, was the creation of exchange competition that forced volume to be geographically fragmented across traditional and nontraditional exchanges. The U.S. market structure is now an aggregation of exchanges, broker-sponsored execution venues, and alternative trading systems—a far cry from the traditional days of specialists and natural price discovery. No single trading destination executes more than 25% of the total U.S. equity market, and in 2009, it was estimated that high-frequency trading (HFT) accounted for 60% to 70% of U.S. shares traded (Plender [2010]). Electronic trading now dominates the market landscape and floor-based exchanges are quickly becoming irrelevant.

The effects of HFT have been felt by traders for some time. These effects were most recently highlighted on May 6, 2010, in what the media dubbed the Flash Crash when natural price discovery failed and liquidity disappeared as HFT firms failed to provide the "structure" they had claimed to provide in light of the technology evolution. High-frequency traders make marginal amounts of money per share on a large amount of volume of small trades. Some market observers estimate that high-frequency traders enter from several hundred to one million orders for every 100 trades they execute (Duhigg [2009]). As the market share for the traditional specialist has dropped from 80% to 25%, specialists are no longer able to provide natural price stability. Proponents of HFT claim that HFT provides increased liquidity and natural price discovery to the market, yet institutions are growing more concerned about its effects. A Greenwich Associates survey found that 45% of participating institutions believe HFT poses a threat to the current market structure, while 36% believe it benefits the market and investors by increasing overall liquidity. The balance does not know enough to judge (Greenwich Associates [2009]).

As a result, the number of quote changes and overall volatility has increased dramatically over the years. The market's average daily price swing has gone from an historically low level of around 1% to above 4% in recent years. The spreads on the S&P 500 more than doubled during the market turmoil in October 2008, and the spreads on Russell 2000 stocks have more than tripled in recent years, while quoted depth has been cut in half.

What does this mean for the buy-side equity trader and how does it fit into best execution? It means a firm must effectively embrace technology, while relying on the instincts of its "human capital." An algorithm can only be as effective as the trader setting the trading strategy behind it. Currently there are more than 20 dark pool destinations and countless algorithm strategies available to traders, which create potentially costly outcomes for investors, including higher trading costs. Traders must efficiently manage the various potential sources of liquidity, and the threat of information leakage.

Understanding the environment, including the functionality and characteristics of each electronic trading venue, can greatly increase the effectiveness of a trading strategy. No algorithm has been able to replace human judgment in trading as markets have become more electronic and fragmented. At times, a trading desk's greatest value-add is when it appears no value has been added at all. In an increasingly complex environment, trading effectively, while reducing market impact and reducing costs, lies at the heart of best execution.

CREATING BEST PRACTICES

Institutions have a responsibility to go beyond defining best execution and to create best practices that encompass the process of best execution. In creating best practices, oversight is essential in order to foster an environment of excellence. Equity-trading oversight committees should be implemented and professionals from all areas of the investment process should be consulted, including compliance, trading, portfolio management, operations, and administration. Trading operations are always most effective when they are defined by policies and procedures that define the context in which to execute.

A firm must support and embrace the use of technology while relying on human capital to facilitate effective strategies. Traders and portfolio managers must also be in close collaboration to ensure all client transactions are executed within the context of best execution for that given order. Part of a trader's best execution responsibility includes the ability to identify and disseminate market-moving news and to relay that news in a timely manner to portfolio managers and analysts. It also includes the ability to identify new regulation and market trends and adapt trading strategies to meet best execution mandates.

In an increasingly complex environment, creating best practices within a firm helps manage the process of providing best execution to the firm's clients.

CONCLUSION

Now more than ever, it is important for firms to define best execution as a process of best practices rather than as a single metric. The process involves both quantitative and qualitative factors and begins by creating a framework in which best execution is most likely to be achieved. Not only do firms need to implement written policies and procedures to create the framework, traders must understand the context in which they trade.

Defined within the context of a process, best execution can be effectively managed and monitored to ensure that fiduciary responsibility is met and that clients' best interests are always at the forefront of the investment process.

ENDNOTE

[1]U.S. Securities and Exchange Commission. Available at http://www.sec.gov/answers/bestex.htm, accessed on 7/27/10.

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