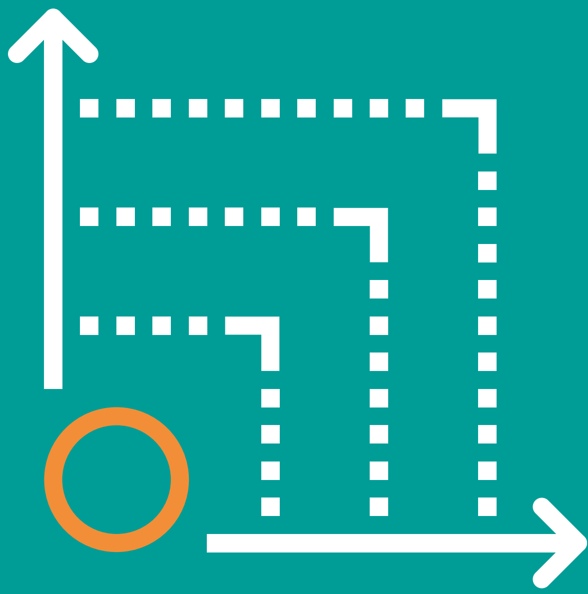
TRANSACTION COST ANALYSIS (TCA) IS MOVING UPSTREAM



Transaction cost analysis (TCA) is not a new concept for asset managers and hedge funds. For some, it's been used for several decades now. Spurred by regulatory change and the emergence of new artificial intelligence (AI)-powered technology, it has evolved from being an after-the-fact, report card-type exercise to one of the highest and most informing trading and investment decisions in real-time.

THIRTY YEARS OF TCA

In the mid-1980s, asset managers began using post-trade TCA to determine which of their brokers were executing their trades for the lowest total cost, mainly using the volume-weighted average price of their transactions as the benchmark. Managers typically received their reports monthly, and were left to compare those reports to determine which brokers would be the most cost effective to trade with in the future. Independent third-party providers such as Plexus Group and Elkins McSherry came upon the scene in the late 1980s and early 90s and took TCA up a level in helping firms with this analysis.

The science and practice around TCA continued to evolve at rapid pace over the next decade, as managers were now able to clearly see how minimised trade execution costs translated into additional basis points of performance for their funds. With this understanding managers looked to identify and reduce all explicit and implicit costs. This included delay costs and opportunity costs that took into consideration the time it took to implement an investment decision and whether a different decision would have produced a better result.

Fast forward several more years and new regulations like MiFID II added an additional impetus for firms to adopt TCA analysis. MiFID II requires asset managers by law to take "all sufficient steps" to achieve best execution. So what does this really mean? Well, best execution is now typically determined based on total consideration; this includes not just the price of the financial instrument and the costs of trading it, but also all the ancillary costs including those such as execution venue fees, clearing and settlement fees, and any other fees paid to third parties involved in the execution of the order.

Running parallel to this evolution has been the emergence of new TCA tools that enable the buy side to analyse performance on a pre-trade and intra-trade basis. These tools, which are often powered by AI or machine learning technologies, take into account myriad real-time data points to help traders determine if they are garnering best execution for their orders by monitoring costs along the lifecycle of the trade.

TCA IN ACTION

While the introduction of the more stringent MiFID II regulatory framework has been a catalyst for firms to find better ways to measure trading activity, it has also served to formalise many processes that were already taking place across many corners of the institutional investment industry.

At TORA, many of our trading analysis tools were initiated before MiFID II. In 2017, we launched a pre-trade TCA solution that uses machine learning to examine the core attributes of a trade, including spread, volatility and volume consumption, thereby estimateing market impact before the trader enters the market.

Shortly after, we launched our TORA next-generation AlgoWheel, a quantitative execution strategy optimiser that uses AI to help firms implement a data-driven broker selection process.

This solution has the capability to identify the best broker algorithm for an order via an analysis of both historical and real-time price and volume time series. This is combined with properties of historical trade execution of orders with similar market capitalisation, sector and volume consumption. Execution for low-touch orders can be automated, and for those orders needing human intervention, real-time market intelligence is provided on screen.

Both solutions sit within our cloud-based order and execution management system (OEMS). Based on the trends we are seeing, the ability for buy sides to leverage the tools of providers whose platforms are cloud-based is key. The cloud allows for the exponentially increasing amounts of data to be stored and then analysed using AI tools. This solution also allows firms to scale applications up or down as needed, a practice known as 'elastic scaling'.

TCA MOVING UPSTREAM

TCA take-up now seems well entrenched, with a 2019 report by Greenwich Associates revealing that 88 percent of equity trading desks now use TCA, compared to 60 percent in FX and just 38 percent of fixed-income desks.

The trend is also being replicated in TORA's business, with most clients wanting to focus on TCA. Many prospects are also telling us that the ability to leverage cloud-based, AI-driven functionality is potentially a reason in and of itself for them to change platforms.

With access to modern pre- and intra-trade tools, firms are now evolving from a manual "waterfall" approach; where independent cost analysis is conducted at various stages of the investment process, to an agile methodology where costs are being calculated, and trading adjustments are being made, in real-time. Fundamental portfolio managers have even begun to use TCA, taking into consideration the expected costs to enter and exit a position as a factor in their portfolio construction decisions.

Where TCA has historically been more closely associated with the trading function by helping to ensure investment decisions were implemented cost-effectively, it is now central to the entire investment decision-making process and is even a key source of information during discussions of a fund's overall strategy.

CONCLUSION

The evolution of TCA and the accompanying AI-powered tools will no doubt help traders make better, more time-sensitive decisions. That said, having the ability to automate processes does not negate the need for human involvement.

Today's modern pre-trade TCA systems will provide managers with information they can use to make more cost-effective and compliant portfolio decisions even before the trading process begins.

TORA provides everything a firm needs to run a fund: portfolio, risk, order and execution management systems, and compliance and analytics engines – all available individually, or as one integrated and unified platform. As a proud independent vendor we look forward to delivering against our product and service commitments for 2019 and beyond.

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