

The Transaction Cost Analysis (TCA) landscape has evolved to date with a variety of service providers positioning different value offerings. These range from the independent specialists analysing their client's total trading activity across the entire investment process, to brokers who provide supporting execution reports, albeit restricted by the transparency of their own timestamps and executions, through to OMS/EMS technology vendors, providing lighter pattern based analytics in an integrated manner to strengthen their offering. From a specialist's perspective, the benefits of TCA are touted to be varied, ranging from alpha capture through to regulatory compliance, with a growing migration of users focusing on extracting more value to improve execution quality. However, irrespective of the service provider and offering, the use of TCA has encountered several challenges to date, and a common criticism which has emerged from the sophisticated user group has been in regard to drawing recommendations from the analytics in a clear and actionable manner. Some houses have also typically relied on their provider's consulting services to varying degrees, for interpretation and application. TCA has therefore remained an art as well as a science.

## DRAWING ACTIONABLE RECOMMENDATIONS FROM TCA

**A**BEL/NOSER CORP introduces a new area of analytics within their Pre and Post Trade integrated environment, which has expanded the focus and way of thinking about TCA measurement for their clients.

### Adapting TCA to a Portfolio Manager's style?

'Manager Styles' is an addition to Abel/Noser's post trade offering and focuses on analyzing the interaction between Portfolio Management (PM) and the Buy Side Trading Desk from a timing and execution perspective. This formulates a visual pattern of the price trend style of the Portfolio Manager and the associated execution by the desk, to highlight that very interaction.

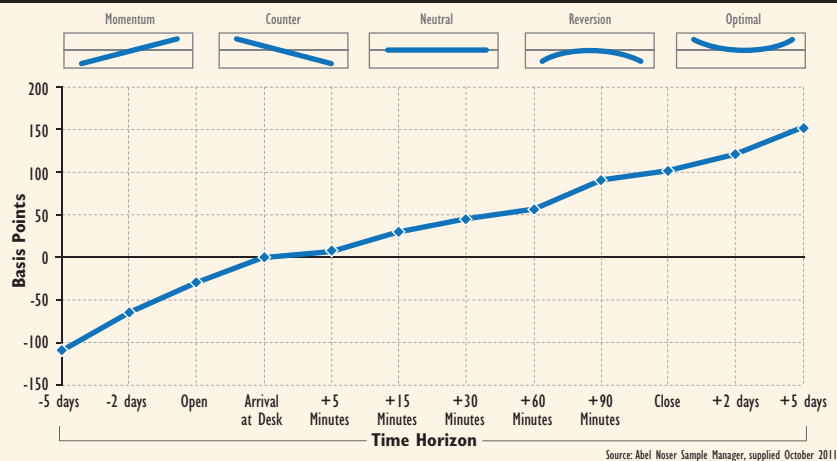
The premise of this approach is that each buy side organization, be it aligned by Investment Teams, Strategies or the Individual Portfolio Manager themselves, may have a particular style. And if one is able to identify a discernible and repetitive pattern, this can be valuable information to the desk which can reveal the most appropriate trading strategy at a high level.

Part of this value serves to reaffirm what Buy Side Traders intuitively know in relation to the orders they handle and their associated difficulty, but often not able to tangibly show. "The manager timing shapes are definitely useful in identifying patterns, with the key being to have something on paper to reinforce our conviction about our different Portfolio Manager Styles, and back up what we are already communicating internally", says Tony Whalley, Head of Trading at Scottish Widows Investment Partnership.

So what kind of patterns are we talking about? Figure 1 depicts a momentum price trend shape where stocks rise rapidly on buy orders and vice versa for sells. The supporting key identifies the most commonly observed patterns.

"It's fascinating when one starts to build a pattern of the different styles, and I have often seen traders intuitively smile because they

**Figure 1: Arrival Chart depicting Momentum Style Portfolio Manager**



**Nupen Shah, Head EMEA Sales at Abel/Noser Corp. Photograph kindly supplied by Abel/Noser, October 2011.**

recognize the portfolio manager by the style of their timing. Of additional value, which is not always transparent, is that the momentum trend continues after arrival, even through to 5 days after with no identified reversion. Now this is a great basis for discussion since it can enable a **debate regarding the level of discretion** on the desk, and in this case whether an Implementation Shortfall based approach, other decision

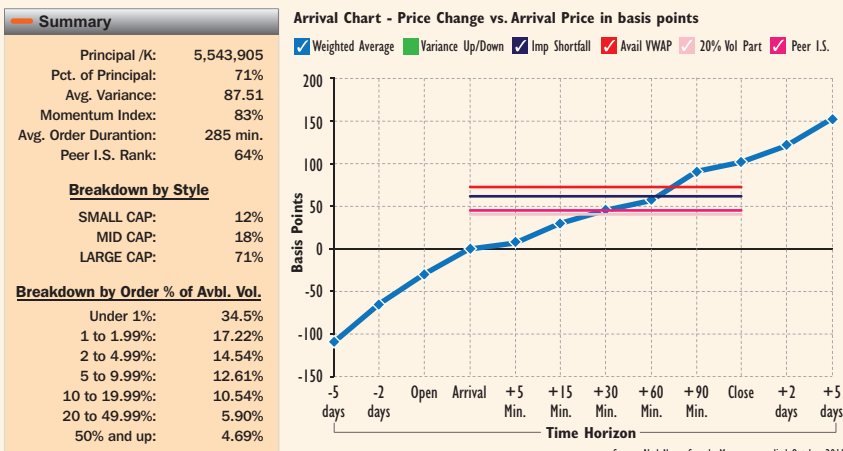
making variables aside, is more of an **appropriate trading strategy to suit the style of the portfolio manager** in question", says Nupen Shah, Head EMEA Sales at Abel/Noser Corp.

What's very apparent in reviewing the commonly identified patterns is that an organization can have multiple shapes or styles embedded. In effect one is handed a **playbook of different styles for fit within the decision making process**. "It's another tool in the box and is there to add value as one of the many pieces of the overall decision making process. For example, for the momentum managers, you know that you usually need to get the trade done quickly, whereas for the value managers, you know you often have more time to implement the right trading strategy", says Tony Whalley.

### Empowering the Buy Side Trader with Actionable Information

To make the PM styles relevant and highlight the most opportunities for alpha generation, one needs to account for the actual implementation. By overlaying execution, one is effectively visualizing the actual interaction that took place, to ▶▶

Figure 2: Manager Styles Web Interface



Tony Whalley, Head of Trading at Scottish Widows Investment Partnership. Photograph kindly supplied by Scottish Widows Investment Partnership, October 2011.

first assess execution quality efficiency, and then begin to identify areas and opportunities for improvement in tune with how the organization is aligned and their associated workflow. "It would be interesting to visually see the interaction between the portfolio managers and associated execution by the desk to highlight how effective my traders are in handling the different styles of the PM's", says Tony Whalley.

Further, when one bears in mind that the order dynamic or instructions are not always well recorded in the OMS, but tacitly known, if multiple transaction cost metrics are overlaid, it enables a scenario analysis of the impact of different trading strategies in reference to the particular PM style.

In talking to Michelangelo Ivaldi, Senior Trader at Generali Investments Italy SGR SpA, he comments that "We think the manager shape can be a great guideline in deciding the execution strategy to be implemented. Of course the order received has to be similar to the typical order for that manager."

It seems that at a high level the shapes present good value, but one can see why the non-believers may wonder how often the trend lines hold. Abel/Noser has therefore taken the route to empower their users with the flexibility to access to these visuals on demand. Further clients are able drill down into the identified patterns to validate the consistency of the shapes. "Our clients have taken a strong interest in these diagnostics and in order to make this information actionable, it was important to allow them to marry our analytics with their intuition to determine a fit within their work flow which can be used to their advantage", says Nupen Shah.

Figure 2 shows the same sample portfolio manager as represented in Figure 1, but this time

with multiple transaction cost metrics. As one sees from the graph, multiple transaction cost metrics have been overlaid to scenario analyse execution quality vs. arrival price.

From an interpretive standpoint, Nupen Shah highlights that "When analyzing execution quality vs. Available VWAP it's possible that execution quality would look good given depending upon the order sizes since the momentum trend continues on. But at what expense? In our experience we have seen that one transaction cost metric can be achieved at the expense of the other, so being able to visualize the opportunity makes it simpler to draw recommendations. In this case what was up for discussion was to review the PM's timing ability to pass orders earlier to try and capture the alpha prior to arrival with the true order size revealed to the desk, and further an increase in the participation rate to maximize alpha preservation."

### Using Manager Styles to Customise Execution


As desks seek to build their analytical support models and execution capabilities, and proceed to manage and vary the use of their execution method selection, what appears to exist is the opportunity to capitalize upon client specific information described above to **customize the execution strategy**.

"Traders have been intuitively doing this in some shape or form, but what exists here is the opportunity to do this in a more transparent methodical manner or by passing this information to a preferred algorithmic broker for use as one of the input parameters", says Peter Weiler, Global Head of Sales at Abel/Noser Corp. In discussing the fit with Michelangelo Ivaldi, he comments that "We are very active in the use

of algorithms and we value the inputs of the manager shapes in supporting the choice of the appropriate algorithm".

Abel/Noser believes this can be taken a step further and has recently launched a series of **Signature Algorithms**, which leverage off a framework of proprietary algorithm suite to customize an algorithm to suit the PM's historical timing style and pattern. "As the timing pattern and trading process evolves, the program will re-evaluate each custom algorithm and continue to make changes when necessary. Our market lab team have also added a back-testing function within our analytics to prove the actionable opportunity here", says Peter Weiler.

So with the above outlined potential applications in mind, does TCA still remain an art as well as a science? Possibly, given there is still the process of reviewing these patterns and applying qualitative and quantitative information to extracting tangible recommendations, a process which typically form part of the consultancy review process provided by the Independent Specialists. Although, however a trading desk chooses to rationalise how to apply TCA analytics within their workflow, what's clear is that with more relevant analytics which bring to light the PM's impact on a desk's ability to contain transaction costs, and with improvements in recording the order dynamics within the OMS dataset, the user is more empowered to make TCA actionable, and does bring TCA a step closer to being a science than an art. ■



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