AbelNoser

Hidden Figures – Introducing a *Portfolio Transition & Event Universe*

Michael Iannucci *– Head of Transition Management – Abel Noser*
Steve Glass *– Co-CEO – Abel Noser*

Introduction

It has long been understood that large trading events are less expensive to implement in terms of explicit costs. The size of such transactions, whether they are manager changes, cash flow events, or fund mergers implemented by asset owner investment staff, or large-scale portfolio rebalancing events implemented by PMs, put them outside the normal course of business (i.e. the day-to-day buying and selling that constitutes the regular, ongoing maintenance of an investment mandate). Further, in many instances, these trades require relatively little high-touch execution servicing (thereby enabling the executing brokers to utilize lower-cost electronic trading tools) and are often put into bidding competition among multiple broker-dealers. As a result, these types of transactions, or 'events,'[1] typically command more favorable commission rates.

What is perhaps less intuitive, and certainly much more challenging to quantify, is whether or not market participants should expect such activity to be more (or less) expensive in terms of *implicit* costs (i.e. market-impact and/or multi-day delay costs). To help answer this question, we have leveraged Abel Noser Solutions' proprietary trade cost universe to isolate the relevant data. In doing so, the database was anonymized, not only to protect client confidentiality, but to also ensure there were no unintended biases in our research.

As the investment industry's oldest trade cost analysis firm, Abel Noser has long managed a very large database of institutional trading activity. The database currently is comprised of over $15 trillion in equity transactions. Importantly, this includes not just trades executed by investment managers, but also the transaction activity experienced by over 150 large asset owners. By parsing event trading from all other trades, we are thereby able to conduct a variety of comparisons *unique to portfolio transitions and other events.*

To our knowledge, this yields the industry's most complete *Portfolio Transition & Event Universe*[2]. While others have attempted to create similar universes in the past, these were typically limited to either events executed solely by that firm's internal trading desk, a subset of providers utilized by a particular asset owner or consultant, or a small collaboration between one or two firms. As a result, these efforts yielded relatively small data sets.

---

[1] *As noted above, events might be transition management mandates, plan-directed cash flow events, or portfolio rebalancings initiated by investment managers themselves. This analysis makes no effort to distinguish these event types (which would require special tagging not typically done today). That said, from a trade cost perspective, the various characterizations of events are often "a distinction without a difference." At their essence, all events represent a transaction in which a relatively large number of securities need to be traded as a package, in a relatively short period of time. This entails a number of common trading-related challenges, considerations, and skills. Consequently, for our current purposes distinguishing between the motivations and/or initiators of each event is less important than understanding the typical range of costs incurred by these types of transactions, under different market scenarios.*

[2] ***Acknowledgment:*** *Vinod Pakianathan, Managing Director and Head of Research Committee, played a central role in formulating the positions and conceptual models used herein. Steven Amodio, SVP of Development, was an invaluable resource and sounding board in the query design that underpins our work. This article could not have been completed without their efforts.*

Furthermore, prior attempts have also often been beholden to the market participants supplying the data. This introduced the risk of "cherry picking" (i.e., the intentional omission of poor outcomes) and/or limiting the scope of analysis to the metrics preferred by each data provider. Not surprisingly, these risks can often skew and distort the results.

In contrast, by quantitatively modeling the characteristics of such events and then querying our trade database to extract the data meeting our criteria, Abel Noser has successfully built an independent global universe comprised of thousands of events.

Specifically, over the four-year period ending June 30, 2021, this query, after much iteration, yielded 4,220 such events totaling US $661 billion in principal traded.[3] The size of these events ranged from under US $10 million to over US $11 billion, with a median size of roughly US $145 million. As a subset of our global *Portfolio Transition & Event Universe,* there were 2,268 US-only events, ranging in size from under US $10 million to over US $10 billion, and a median size of roughly US $151 million. As a result, this *Portfolio Transition-& Event Universe* represents a robust dataset from which to survey the scene.

What We Observed

The existence of a true portfolio transition universe opens the door for a wide range of analysis. Testing hypotheses, challenging previously held assumptions, and guiding future implementation strategies are but a few of the practical applications this database offers. As an initial phase, we chose to investigate four topics: the costs associated with event verses non-event trades; the costs associated with balanced verses unbalanced events; the relative market share of events; and the costs associated with large verses smaller events.

Event Trades vs. Non-Event Trades

In absolute terms, we see significantly *lower* implicit costs for event trades than non-event trades as measured by implementation shortfall slippage from both "arrival price" (i.e. the time when trading began) and versus the "prior night's close" (the industry standard for transition management events). In point of fact, our analysis suggested that realized costs for events are roughly 40% lower than the realized costs for non-event trading.

As shown in Table 1 below, the implementation shortfall costs incurred on events averaged around -24 bp, with the typical range (i.e. 1 standard deviation) being between +110 bp and -159 bp. Outlier events (i.e. 2 standard deviations) ranged from almost +2.5% when prices moved favorably, to worse than -3% when prices moved in an adverse direction. In our view, this range of costs can be partially attributed to the level of attention (or lack thereof) that asset owners and their investment consultants applied when planning and implementing those events.

[3] *While the exact method Abel Noser used to model events is proprietary, key factors include: trade side, a single portfolio from which the securities are traded, the percent of activity involved in the event relative to the portfolio's normal trade activity levels, the number of securities traded, and the extent of uninterrupted days when those securities were traded.*

In contrast to the relatively low costs incurred on event trades, the median costs incurred on non-event trades was -40 bp. Depending on their trade characteristics (e.g. capitalization, liquidity etc.) and market conditions, they frequently exceeded multiple percent. Importantly, these observations were consistent over time.

Table 1 –Event and Non-Event Trading Costs

Trade Type	Cost verses Trade Date Open	Cost verses T-1 Close	Cost verses VWAP	Average Commission	IS Standard Deviation
Event	**-24.4 bp**	**-25.0 bp**	**-3.3 bp**	**-2.3 bp**	**±135 bp**
Non-Event	**-40.1 bp**	**-43.3 bp**	**-3.7 bp**	**-4.2 bp**	**Not relevant for single-stock trades**

To a certain degree, these findings are not entirely surprising. In particular, many if not most events are near "information-less" in nature – instigated, as they are likely to be, by a strategic or portfolio-level investment calculation regarding a particular strategy, benchmark, or risk posture, rather than a security-specific alpha expectation (whether news or research-driven). As such, we would typically expect these events to encounter less adverse price swings and fewer parties competing in the marketplace for those same securities.

Another potential explanation might be that those making the investment decisions (asset owners in the cases of transitions and plan reallocations/restructurings; investment managers in the cases of inter-portfolio rebalancing) may worry that these large transactions could have an outsized impact on their portfolio's overall investment returns. And they therefore take more care to implement these event trades with the least possible erosion to alpha (e.g. engaging stakeholders with better tool sets – such as transition managers).

All that said, when we adjust the observed costs to take into account differences in volatility, liquidity, and spread, only about 6 bp of the 16 bp difference between the event and non-event median trading costs are explained. While further investigation is clearly warranted, on the surface, the remaining 10 bp in lower event costs potentially validates the time and attention placed on the prudent implementation of events by asset owners, their investment consultants, and the expert partners they engaged (e.g. transition managers etc.).

Two-sided vs. One-way Events

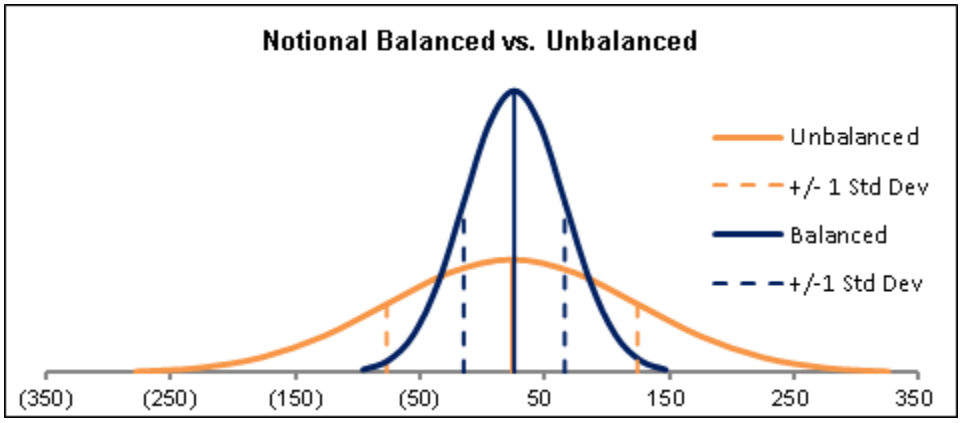
Aside from comparing event to non-event trades, we also reviewed the costs associated with balanced events (i.e. where the principal value of the buys was within 5% of the sell principal value) verses unbalanced event trades. In this regard, we found that notionally balanced events exhibit similar median costs (-25.5 bp), as notionally unbalanced ones (-23.8 bp). However, as shown in Table 2 below, notionally balanced event trades exhibit a significantly tighter range of outcomes (+/- 40.5 bps), than unbalanced events (+/-100.7 bps).

This is intuitive, since the two-sided nature of a balanced event essentially acts as a natural hedge against market movements that may occur during the course of an event. In other words, with a two-sided trade, if the market rises during the trading period, the target securities would tend to become progressively more expensive

to buy. However, the legacy securities would concurrently become more profitable to sell. As a result, the higher costs incurred on the buys are to a certain degree offset by the higher profits made on the sells. Accordingly, the primary costs incurred on two-sided trades are typically limited to market impact costs, and not multi-day delay costs.

This natural hedge is, by definition, missing on a one-sided or unbalanced event. Consequently, with one-sided or unbalanced events, unless a synthetic hedge (such as a basket of futures or ETFs) is deployed, those events are therefore exposed to the risk of adverse market movements. Obviously, the market risk associated with each respective event will vary based on the composition of the securities to be traded. However, when looking at all one-sided or unbalanced event trades in our universe, that risk is quantified by the 100.7 bp standard deviation shown in Table 2 below.

Table 2 – Standard Deviation of Events



These observations validate the emphasis that many asset owners place on managing their event's market exposure throughout the implementation period. While not all asset owners are permitted to or comfortable with utilizing synthetic hedging instruments, this data underscores the potential value in at least considering various hedging techniques on unbalanced events.

It's worth noting that even in the absence of formal hedging, events can be partially managed so as to minimize market risk. Such risk-reduction tactics include specific instructions to transition managers, potentially denying an outgoing (or incoming) manager's request to liquidate/fund their own portfolios, and implementing contributions to (and redemptions from) commingled funds using in-kind slices of the fund's portfolio holdings rather than in cash. That said, if unbalanced events are not traded any differently than balanced events (in terms of speed, structure, or use of trading venues), the lack of a hedge (natural or synthetic) will introduce greater risk associated with adverse market movements.

Market Share

Given the generally lower costs associated with event trades, we were curious as to whether events represented a significant portion of the overall market's trade activity. As it happens, event trades are a growing part of the

trade universe as a whole. As shown in Table 3, over the four years we reviewed, events constituted 14.4% of the total universe in Year 1, 15.2% in Year 2, 18.6% in Year 3, and 18.2% in Year 4.

This reconciles with our intuition about the growth of passively managed accounts, and how they trade.

Table 3 – Event Market Share

Quarterly Time Period	% of Market Share
2017 – Q3	**10.8%**
2017 – Q4	**13.0%**
2018 – Q1	**11.1%**
2018 – Q2	**17.4%**
2018 – Q3	**11.8%**
2018 – Q4	**17.2%**
2019 – Q1	**13.1%**
2019 – Q2	**18.2%**
2019 – Q3	**16.5%**
2019 – Q4	**16.6%**
2020 – Q1	**15.1%**
2020 – Q2	**25.0%**
2020 – Q3	**17.8%**
2020 – Q4	**18.4%**
2021 – Q1	**16.5%**
2021 – Q2	**19.3%**
Total	**16.7%**

Largest Event Trades

It is also important to understand the impact that event size has on event trading costs – particularly in different markets and for different security capitalizations. We envision conducting more research in this area, but as an initial analysis we reviewed the costs incurred on all large events (i.e. greater than US $1 billion). Our focus on large events was in recognition that such events often entail more operational tasks, greater liquidity needs, longer trade durations, and increased risk of "information leakage." This of course begs the question: do larger events incur larger trading costs?

During the review period there were 109 events that exceeded the US $1 billion threshold. Interestingly, and somewhat counter-intuitively, these larger events were executed more cheaply than the other events in absolute terms, and considerably less so once we account for exogenous factors that contribute to trade difficulty. Specifically, Table 4 below shows that the median cost incurred on large events was a little under -19

bp, while the rest of the events collectively averaged about -27 bp, a differential of 8 bp. Further, after taking into account trade difficulty (i.e. liquidity, volatility, spread etc.), large events were almost 14 bp less expensive.

Table 4 – Trading Costs of Large and Small Events

Trade Type	Trade Value	Cost verses Trade Date Open	Cost verses T-1 Close	Cost verses VWAP	Average Commission	Cost vs. Benchmark
Large Events	**$200.1 billion**	**-18.9 bp**	**-24.3 bp**	**+2.1 bp**	**-1.5 bp**	**-5.4 bp**
Other Events	**$411.8 billion**	**-27.0 bp**	**-25.4 bp**	**-6.0 bp**	**-2.6 bp**	**-19.3 bp**

This is not what we would have expected to see. All else being equal, a larger sized event should, by definition, be less liquid and therefore more difficult/costly to trade than smaller sized events. Accordingly, while not immediately apparent from our initial analysis, the implementation of larger events must have entailed different trading dynamics than that of smaller events.

Perhaps, the larger sized events were executed more frequently with top-tier transition managers. Possibly larger events command better pricing from trading counterparties, or maybe larger events simply receive more attention and resources than smaller events. Additional analysis into the root causes of this cost disparity is called for, and may well be the subject of future research.

Summary

As discussed above, our *Portfolio Transition & Event Universe* allows us to test a number of previously held assumptions, offers some unique insights with practical implications, and opens the door to several future applications. We believe this data can potentially help better inform asset owners, investment consultants, and investment managers who implement events or portfolio rebalancings.

At a minimum, the relatively low costs noted herein may embolden decision-makers to tackle significant restructurings to their investments when they have a reasonable expectation of additional alpha. More specifically, when the catalyst for a potential event is not a value judgment on one security but a fundamental change to an entire mandate or to the model that supports it, the bar to be cleared (in the form of transaction costs to implement changes) is lower than conventional pre-trade analysis might suggest.

Further, aside from recognizing the generally lower costs on event trades, deeper analysis may yield new observations with actionable insights. For example, it's certainly helpful to know that event trades tend to be less costly than non-event trades. However, it's even more useful to know why those event costs were less, and what asset owners should do (or not do) on future transactions to increase the likelihood of similar results.

To this end, we anticipate exploring a number of additional topics with our *Portfolio Transition & Event Universe.* These include:

- The implications of this data for pre-trade planning and pre-trade analysis could be instructive. Current industry cost models are built on (and back-tested with) a mix of both event and non-event trading. Does this data suggest that for purposes of pre-event planning and bid solicitation, "trade intent" is an important input? Put another way, should event cost-estimation models be based on event-driven trade data?
- Events are often structured around the end of the month/quarter so as to, among other things, create clean performance reporting records. Are there any cost implications (positive or negative) associated with this timing decision?
- Similarly, how does trading near an index change/rebalance impact an event's costs?
- What can this dataset tell us about decisions relating to trading strategy? Do market-on-close ("MOC") trades measure better or worse than implementation shortfall trades?
- To what extent are the high volatility names (such as GME in Q1 '21, etc.) responsible for the observed cost distinctions between event and non-event trading?
- To what degree do factors such as capitalization, liquidity, or market direction affect the outcome of an event?

In summation, our *Portfolio Transition & Event Universe* opens up a new avenue for unique research. We welcome this exciting development. In today's environment, greater transparency into the formation and magnitude of event-driven costs can be a valuable tool for those tasked with implementing such events; and is consistent with prudent best practices.

Learn to sniff out that which might lead to fundamentals and turn aside things that clutter up the mind and divert from the essentials.
Albert Einstein