AnotherAspect: Liquidity in Crises

April 2020

Alexis Blair, Director of Trading at Aspect Capital, reflects on recent market events and what we have learnt from previous crises.

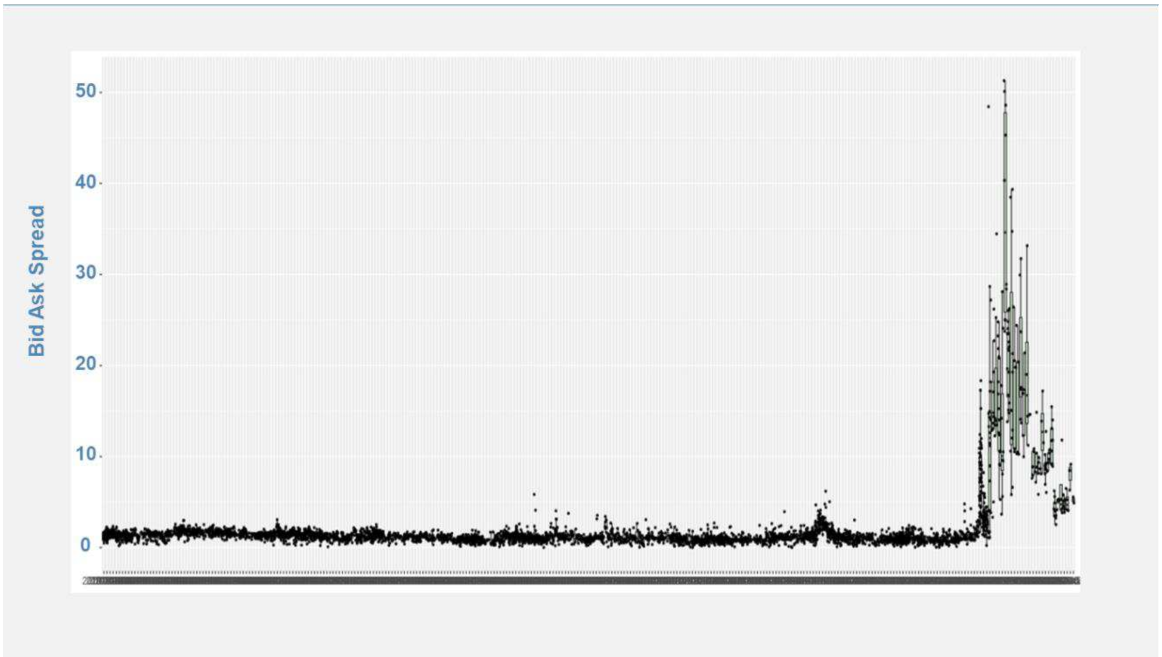
March 2020 saw some of the most challenging trading conditions we have witnessed in some time. Can you give us a flavour of what you experienced in trying to navigate the markets during this period?

I would say that we saw the toughest liquidity conditions since the global financial crisis during March, precipitated of course by the economic fallout from the Covid-19 pandemic. No asset class was spared in the scramble for liquidity.

We saw particular challenges in the over-the-counter (OTC) space, especially FX and interest rate swaps. Spreads widened across the board in FX. Scandinavian currencies, which were particularly hard hit with the drop in oil markets, went from an average of two to three basis points wide to as high as 30 basis points at times (see Figure 1). Emerging Market FX, which typically sees spreads in the region of three to five basis points wide dependent on the currency, increased to as much as 50 basis points wide. Emerging market interest rate swaps were also among the most significantly impacted assets, with two-way quotes not available at certain points in time as liquidity dried up.

In the futures space we saw several stock index and commodity markets repeatedly hitting their limit up/down moves, meaning there were periods in which all market participants were unable to execute desired trades.

Figure 1: USD / NOK Bid Ask Spread Range: Jan 2019 to Apr 2020



Source: Aspect Capital.

In light of these challenging conditions, was trading of any of Aspect's programmes affected?

Fortunately, we have an experienced Execution team and sophisticated execution systems which are designed to cope well with these sorts of events. We have learnt from past crises and are well positioned to navigate challenging market conditions.

Overall there was sufficient liquidity across all markets to get all of the trading we wanted done. Whilst slippage (and slippage volatility) during the period was materially higher than pre-crisis levels, it was not prohibitively high. Liquidity events like these are expected to cause higher slippage, and our programmes are robust enough to weather them for temporary periods.

What are some of the key design features of your execution systems which enabled you to navigate the recent difficulties?

There are certain inherent features of our systematic investment programmes which help in these sorts of circumstances. Market liquidity (in normal and stressed scenarios) is an important input into the portfolio construction process and positions in individual assets are sized accordingly. Our programmes also employ volatility scaling, meaning that as markets get riskier, our programmes' desired positions naturally reduce in size, thereby resulting in reduced trading volumes and leverage during prolonged periods of market stress.

Specifically in terms of our execution systems, a significant percentage of our trading today is executed using either proprietary or modified third-party algorithms. These are continually enhanced through ongoing research and have been specifically designed to be robust enough to deal with challenging market conditions. These fully-automated workflows were able to continue executing the vast majority of our orders throughout February and March, requiring little additional oversight as compared to normal trading conditions, which allowed our Trading team to devote the majority of their attention to the more challenging markets where automated execution was not possible or desirable, such as the OTC markets mentioned above.

You mentioned that you have experienced a few previous market crises. What were some of the key similarities and differences this time around, and what lessons had you learned from previous scenarios which helped you to navigate the recent events?

The unique feature of the Covid-19 crisis has been that the liquidity crunch across asset classes has been accompanied by the forced reorganisation and relocation of nearly all major market participants, as lockdown measures have been introduced worldwide. Fortunately, at Aspect, we had already migrated to a largely virtualised infrastructure that has (alongside other benefits) enabled our Trading team to begin trading remotely as a matter of course. This enabled us to respond proactively and quickly once it became apparent that the imposition of lockdown measures in the UK (where the entire Trading team is based) was only a matter of time.

The Global Financial Crisis was the last time we witnessed such severe liquidity issues across such a breadth of asset classes and regions simultaneously. From that experience, we learnt that handling orders in a predominantly human-trader environment across 200+ markets caused significant workflow bottlenecks. Consequently, we identified that a key tool for maintaining effective execution for systematic strategies in market crises was having the ability to execute orders in the most developed markets in a fully automated fashion. We felt this could be done by developing both execution algorithms that were robust enough to deal with highly challenging market conditions, and an exception management process that allowed for user-friendly oversight and intervention of automated trading.

We have invested heavily in these areas since and continue to do so, with further real-time stress tests being provided by various Emerging Market FX crises in the intervening periods, including the US “Taper Tantrum” in 2013 and the Russian Financial Crisis in 2014, and there is no doubt these tools enabled us to navigate the recent events relatively unscathed.

Another feature of the recent market events was the imposition of short-selling bans in France, Spain, Italy and Belgium. We have seen this sort of response from regulators before, most recently during the Eurozone crisis (2011), and so whilst the most recent bans posed challenges in terms of interpretability and speed of implementation, we had anticipated them in advance and were able to prepare ourselves to an extent.

Alexis Blair – Director of Trading

Mr Blair joined the Aspect Capital Execution Team in January 2001 after graduating from Sheffield Hallam University. During his time at Aspect, Mr Blair has covered several positions within the Execution team, initially starting on the Commodities desk and then later specialising in FX as a Senior Trader. From January 2011, Mr Blair oversaw the management of the Financials Execution desk and as heavily involved in the research process to develop Aspect's Execution systems. In April 2013, Mr Blair was appointed Co-Head of Aspect's Execution Team before later being appointed sole head of the team in July 2014.

If you have any questions on this document, please contact your usual Aspect IR representative or alternatively email investor.relations@aspectcapital.com