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Increasing Margin Exposure – Firms see over 150% increase in funding cost

By Stuart Smith, Co-Head Business Development, Acadia

As the global economy continues to go through a period of extreme volatility, the impacts on costs of trading are increasing. In particular, the costs of bi-lateral initial margin (IM) on OTC trading have risen dramatically over the last 6 months.

The introduction of an Initial Margin (IM) requirement for bi-lateral trading was a key part of the post financial crisis reforms to create greater stability. It requires that firms post initial margin to help cover potential losses if one of the counterparts were to default.

The level of initial margin exposure is primarily determined by the ISDA SIMM™ methodology, the aim of which is to calculate a margin that is capable of covering a margin requirement to a 99% degree of confidence given a 10-day Margin Period of Risk. The model is recalibrated annually based on back-testing and benchmarking undertaken by the industry, and the latest recalibration introduced the impact of COVID shocks for the first time.

Acadia has estimated for parts of its client base an increase of over 150% in the cost of margin, made up of a 55% increase in exposure and a 90% increase in funding costs.

Increased Exposure Levels

Acadia calculates the ISDA SIMM™ exposure levels daily for 215 clients, in the process generating data that offers insights into large-scale trends in margin requirements. Using this data, it is possible to see the impact of the post-COVID recalibration on the industry. The chart below (Chart 1) shows the average weekly exposure of all firms in the 3 months before and after the recalibration at the end of Week 49. The data has been normalized to the average posted margin over the full 6-month period.

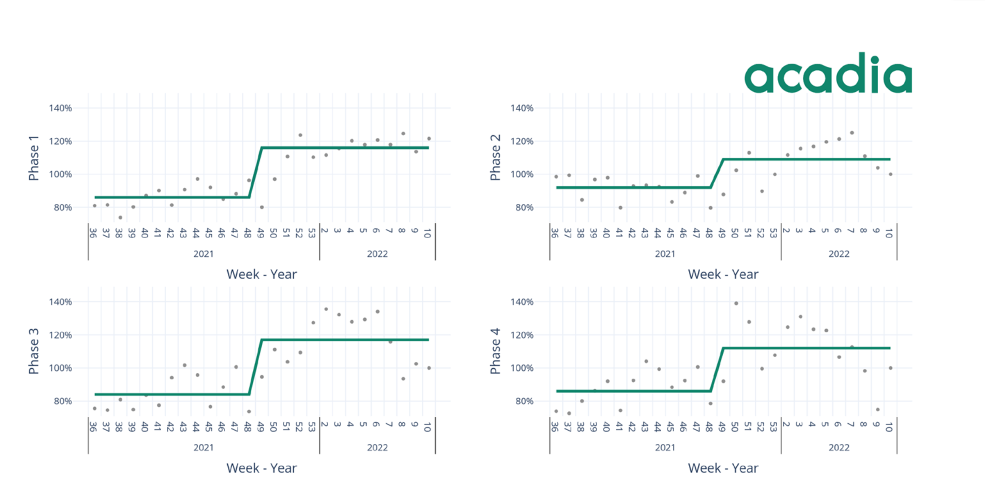

Chart 1: Avg Weekly IM Exposure (Phases 1-4) before and after SIMM recalibration

The requirement to calculate and post Initial Margin was rolled out in six phases from 2016-2022, with the largest firms in phase 1, and progressing to smaller firms in subsequent phases. Across all four initial phases of the Uncleared Margin Rules (UMR), the impact of the recalibration is clear and substantial. Margin levels have increased, and by a significant amount. The changes in exposure averaged over the 3 months before and after are shown in Chart 2 below.

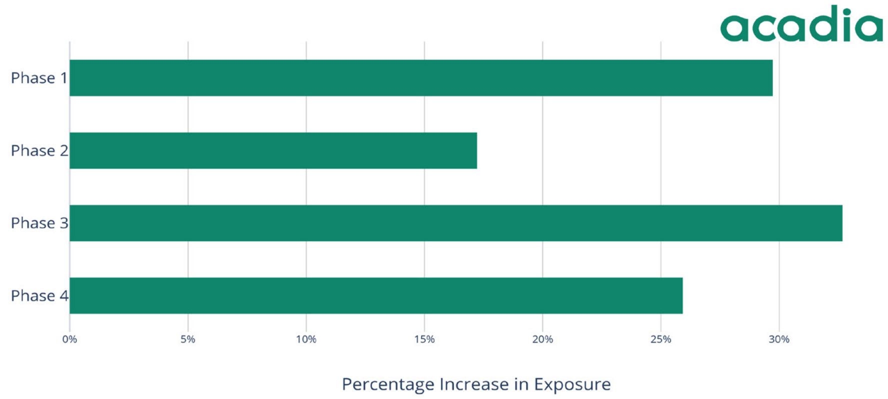

Chart 2: Percentage increase in IM Exposure
Firms have seen between a 17% and 33% increase in exposure with an industry aggregate across Phase 1-4 of 29%.

Increased Cost of Funding

The increase in exposure means firms are having to tie up more securities to cover margin calls. This comes at the same time as the costs of funding are increasing dramatically, driven by base rate increases by central banks attempting to control soaring inflation.
From January 2022 – June 2022 the SOFR for 3M has increased by 185bps.

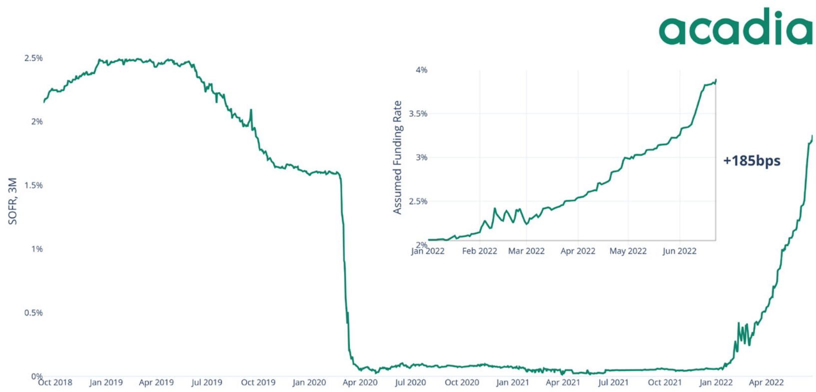

Chart 3: SOFR Rates compared to Assumed Funding Rate

This rise in SOFR is likely to cause the funding rate of many financial institutions to increase by multiples. While funding spreads vary wildly between institutions, we have assumed a 2% funding spread (as representative of a large buy-side firm). Given that the increase corresponds to a 90% increase in funding costs.
Together these effects are compounding to create a sizeable increase in costs owing to initial margin. The increase could be up to 150% from December 2021 through to July 2022[1].

Outlook: Managing Risk

While the impact of the initial COVID shock is now included in the recalibration of ISDA SIMM™, there have been more recent significant market shocks (Commodity Price Volatility, Inflation Spikes, Interest Rate Rises)

[1] Increase in Initial Margin of 29% and Cost of Posting of 90%, compounded to 145%

that are likely to cause increases in future recalibrations. At the same time central banks continue to increase base rates as they struggle to contain inflation, all of which drives up the cost of funding further. This makes it essential for firms in the scope for UMR to have a detailed understanding of their position.

For firms above the $50MM threshold, there is a pressing need to control exposures and ensure readiness for further recalibration rounds. Tools to help optimize exposure are going to be important either through pre-trade analysis or risk optimization.

For firms below the $50MM threshold, it is essential to understand exposures and avoid papering agreements where they are not required to be operationally ready. Tools to understand exposure and monitor it with respect to thresholds will be key, as well as the ability to perform pre-trade analysis so the full costs of a new trade can be understood before it is executed. As we approach the next recalibration, exposure optimization tools will be vital to ensure even with further model changes that firms portfolios stay below threshold where possible.

The alternative in both cases is a far higher cost – and risk of future increases – than what was experienced in the early days of UMR, pushing up the priority for industry participants to routinely measure and actively manage the costs of posting IM.

About the Author

Stuart Smith joined Acadia in 2022 as Co-head of Business Development. In his role, Stuart is responsible for driving the strategy, development and growth across Acadia's Risk and Data suite of solutions. Stuart has worked in the capital markets industry for over ten years, implementing a range of risk systems with financial institutions globally. Prior to joining Acadia, he led the development of FIS's market and credit risk solutions, working with clients on complex problems including regulatory compliance, real time credit limits and innovative high performance aggregation solutions. Stuart holds a Masters (MPhys) from Oxford University and PhD in Quantum Electronic Engineering.

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