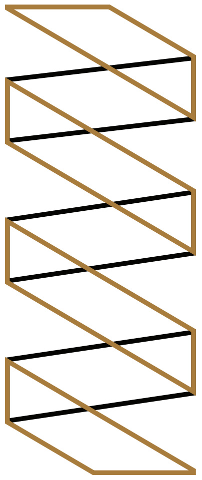
Risk publications



Risk Awards 2023 Winner

Clearing house of the year

LCH

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Derivatives market veterans would tell you that the sign of a good clearing house is that you forget it is even there. By that standard, LCH had a remarkable year in 2022, keeping the clearing business running smoothly despite market events that will live long in the memory of those who experienced them.

Indeed, some sources needed reminding about the default of one of LCH's members, Russia's VTB Bank, after sanctions prevented it from operating in the UK and dragged down the valuation of its portfolio of mostly Russia-linked assets.

"So many things have happened since the Ukrainian crisis that you get the feeling it was more than 12 months ago," says one bank source in the European Union.

The largest land war in Europe, after Russia's invasion of Ukraine, wasn't the only moment of drama. Surging inflation, aggressive central bank rate hikes in response, and a looming recession, all served as a major stress test for LCH, which is considered the steward of the cleared rates and foreign exchange markets.

The EU bank source says they were able to focus their attention on managing risks related to other central counterparties (CCPs) because LCH "did so well" from a "pure risk management perspective".

In LCH's home market, it had to reckon with the largest long-dated sterling rates and inflation moves ever seen by the clearing house, after then UK prime minister Liz Truss announced a wallet-busting 'mini-budget' that alarmed markets. While rivals upped margins by as much as 200% for key contracts referencing UK interest rates, sources at the time applauded the LCH model that allowed it to contain margin hikes at roughly 30–40% for sterling-referencing swaps.

"Those five days were probably the most extreme moves in govvies [government bonds] we have ever experienced," says a clearing executive at a large EU bank.

Despite the volatile environment, LCH was still able to grow several business lines, including its credit default swap (CDS) clearing service CDSClear, which continues to impress banks in the face of stiff competition from incumbent Ice.

The cloud on the horizon is the possibility of the European Commission seeking to restrict EU client access to the CCP in an effort to onshore the clearing of euro-denominated derivatives. In practice, while lawmakers could yet toughen the rules, the language adopted in an EC proposal in December 2022 is softer than many had feared. LCH can continue its EU business until 2025 at least, and the signs for what will happen after that are becoming more encouraging.

Learning lessons from history

LCH's first major challenge of 2022 saw it confronting a strange scenario in which a member was solvent and theoretically financially able to meet margin calls, but was unable to do so because of sanctions imposed. Russia's state-owned VTB had its assets frozen by UK and US authorities the day after Russia invaded Ukraine on February 24.

But LCH was prepared. In response to the initial invasion of parts of Ukraine in 2014, the CCP had applied a 25% margin add-on to all of VTB's positions to reflect the credit risk of the bank, as well as its correlated risk to wider Russian exposure.

The margin add-on was sufficient to cover mark-to-market losses in VTB's frozen portfolio, despite a huge increase in the volatility of the Russian global depository receipts as sanctions were announced in February 2022.

"We were very conservatively margined in that sector, so that gave us the luxury of time to be quite thoughtful in terms of the way that we address the workout," says David Horner, the chief risk officer of LCH Limited in London.

Winding down the Russian bank's portfolio of cleared assets in an orderly manner was made more complicated because UK and US regulators held differing views. The UK Treasury's Office of Financial Sanctions Implementation on February 25 allowed a 30-day grace period in which VTB could meet margin calls and wind down its portfolio. But the US Treasury provided no such exemption.

As a result, LCH executives believed the only option was to declare VTB in default and seize its assets and positions on March 3. This allowed the CCP to close out the portfolio itself with the help of two or three market participants in the span of just five hours. The wider market was not invited to bid on the portfolio for fear of information leaking.

LCH confirmed that the portfolio was resolved within VTB's initial margin (IM), and large LCH members who spoke to *Risk.net* at the time and several months later said the process seemed to have gone well.

In addition to the specific attention paid to Russia risk, Horner says LCH's large- and small-scale fire drills played an important part in making sure the clearing house was well prepared when the storm broke.

"Organisational muscle memory is definitely there because of all the exercises that we've done," says Horner.

None of the previous fire drills included a hypothetical scenario where sanctions laws would physically prevent a member from paying margin, he adds, but they may feature in future exercises. However, he emphasises that highly tailored rules would rely on being able to predict future scenarios in great detail, which is "very difficult". Instead, Horner thinks the best response is to maximise the flexibility within the CCP's rule book.

"I wouldn't want to tie our hands in a way that would be linked to a historical rule set," says Horner. "We want to make sure we have the tools to cope with whatever gets thrown at us: the next challenge will no doubt be different."

Risks outside the model

In fact, LCH was already facing a very different kind of challenge just six months later. Last year saw the return of hawkish central bank policy to combat rising inflation, which was higher than 10% across many jurisdictions, leading to big rate hikes and market volatility across asset classes.

LCH uses a constantly adjusting value-at-risk model to calibrate initial margin levels based on a 10-year lookback, with an additional set of static stress scenarios to help calibrate margin floors.

The model calibration is famously conservative, but has grudging admiration from many in the market. While rising rates increased volatility and led to rapid margin adjustments, the real challenge came in September, when UK chancellor of the exchequer Kwasi Kwarteng unveiled the ill-fated mini-budget, which eliminated the top rate of tax and subsidised household energy bills through a large increase in government borrowing.

Many clearing houses have faced criticism from members and clients for setting margins too low during calm conditions, leading to excessive jumps in margin when the storm hits. That behaviour drains liquidity from the market at the worst possible time.

LCH has not been immune from such criticism, especially in the wake of the UK Brexit vote in 2016. However, in recent years, many – but not all – market sources argue that the CCP sets its margin levels conservatively during the good times, but not excessively so. .

Margin breaches are important because they show the difference between variation margin and initial margin at a member bank for clearing accounts.

Since initial margin is supposed to cover the possibility that a member defaults during a market move that goes against a member's positions, it is crucial to keep initial margin above variation margin for the vast majority of the time.

But not necessarily all the time – otherwise, the business-as-usual margin requirements could be painfully high. The clearing house sets itself a 99.7% target confidence level. Both LCH SwapClear and RepoClear saw a record number of breaches, leading to their actual confidence levels dropping to 99.4% and 99.51% respectively in the third quarter of 2022. Out of LCH SwapClear's 6,000-plus client accounts, 128 of them breached in the same period, up from just two in the previous quarter.

"I think when you look at events like the outbreak of war in Ukraine, and in the UK following the budget, you want those events to be outside the envelope for the margin model," says Horner.

"So the fact that we had relatively high numbers of backtesting exceptions clustered around those events is not surprising."

Risk.net spoke to sources immediately after the mini-budget chaos, and then months later after LCH published the margin breaches. Market participants were overall positive about how LCH's margin model handled the event, and did not call for any substantial changes.

"What happened in Q3 was much worse than the stress scenarios or the normal market conditions that initial margins are supposed to cover," says the EU bank clearing source. "The fact that there were breaches during such an extreme period is not a weakness from our perspective."

The source adds that regular IM requirements at LCH are higher than at other clearing houses, in particular due to the liquidity add-ons for larger positions, designed to reflect the potential difficulty of liquidating those positions if a member defaults.

Indeed, one large swaps user on the buy side thinks LCH sets swaps margins too high. But he still praises its overall approach to margin policy.

L to R: Isabelle Girolami, Susi de Verdelon, Antony Baldwin, David Horner, James Pearson and Kate Birchall

"They do listen to our point of view, and we don't expect them to change things on our whims," says the buy-side source. "We find them more communicative and transparent than other CCPs."

The only manual change LCH made to its models last year was adding a new stress scenario to calibrate the size of its default fund. Reflecting on the incident, LCH's Horner doesn't rule out making further changes to the model in the future.

Still growing

The successful management of market volatility is all the more impressive, set against a backdrop of high volumes for trades and cleared notional for most LCH services in 2022. SwapClear saw its notional and trade count up 18% and 20% respectively compared with 2021, while ForexClear notional grew 14%. But the standout performer has been LCH's CDSClear service. While the volumes are still relatively low, CDSClear is operating in a competitive market long dominated by Ice.

The service grew 47% in 2022, with €3.36 trillion ($3.7 trillion) registered in index single names and options notional, according to LCH, making it a major competitor to Ice in Europe. Ice remains dominant in the US, however, with LCH only clearing $124 billion in notional.

The groundwork in 2022 by LCH's CDS sales department, described as "very enthusiastic" by end-users, may reap significant rewards in the years ahead. Ice's decision to move all CDS clearing from its EU entity Ice Clear Europe to the much larger US entity Ice Clear Credit startled market participants and regulators, and angered some banks.

While many market sources have flagged their intention to stay with Ice, plenty also say they intend to trial LCH as well. Only time will tell if the move to LCH will be significant, or if the market will keep faith with Ice.

"We've seen a significant increase of interest from buy-side clients that were clearing their CDSs with Ice," says Frank Soussan, head of CDSClear.

"Around 75% of the clients from Ice Clear Europe that are moving to us have moved already or are in the process of moving, and will have moved before the deadline Ice has set for them."

He recognises that this enthusiasm is in part caused by the potential headache of onboarding with the US entity of a large bank in order to clear at a US CCP. By moving to LCH instead, clients can mostly keep intact their existing clearing relationships. But he also believes LCH represents a "true alternative" to Ice, with the liquidity to try to compete. ■