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OTC infrastructure service of the year: Quantile Technologies

Risk Awards 2019: Compression provider has been quick to respond to market needs, say dealers

Stephen O'Connor (left) and Andrew Williams, Quantile

Image: Geraint Roberts

Risk staff

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For almost a decade, swaps compression was a monopoly. After all, the bigger the community of users, the higher the chance of finding an offsetting trade to enable a tear-up of contracts. That changed in 2017 when new players erupted onto the scene, responding to growing regulatory constraints on banks' balance sheets, with each provider claiming the best compression efficiency for its clients.

Dealers are hedging their bets and most are signed up to all three major providers. But one is emerging as a preferred partner – Quantile Technologies.

Bank clients say Quantile, with its start-up swagger, has been better able to tailor compression runs to their needs.

"Say we want to change something, it can be turned around quite quickly," says a clearing expert at a US bank. "The other providers have all got their benefits, but for Quantile it's the agility that they have."

In a segment of the industry where less really is more, compression providers compete on the efficiency with which their algorithms manage to slash notional. Those algos remain a heavily guarded secret, but Quantile appears to be punching above its weight.

It might not be the biggest player in terms of total notional compressed or number of clients, but the three-year old firm is already snapping at the heels of its larger incumbent by some metrics. One dealer says that on interest rate swap compression cycles at LCH's SwapClear, Quantile now typically achieves 80%-90% of the notional compression volume compared to its largest competitor, TriOptima. The smaller player achieves that with just 15 dealers signed to the compression service, and participants believe it could overtake its larger rival by total notional compressed per cycle, as more sign up.

"As the population of participants grows, we expect the amount getting compressed to become greater," says the clearing expert at the US bank.

A second bank confirmed the compression volumes in cleared swap runs are already comparable between the two providers. In November, Quantile hit new records for total volume compressed at the London-based clearing house.

"The impact of our LCH compression service has been growing each quarter as we onboard more legal entities – for example, in November, we have compressed over $5 trillion notional and we expect this upward trend to continue into 2019," says Andrew Williams, chief executive and co-founder of Quantile Technologies.

Compression has become a core post-crisis activity since banks came under pressure to slash swaps notional and reduce counterparty credit exposures – both heavily penalised under Basel III capital and **leverage rules**. At LCH alone, banks have managed to compress more than **$2.5 quadrillion** worth of swaps notional since 2014.

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Launched in 2015, Quantile began compressing swaps at LCH in October 2017. Until then, TriOptima had been the only provider since joining the CCP in 2008. Shortly after Quantile broke the monopoly, BGC's **Capitalab** followed suit with its own compression offering.

"We thought there was a need for competition. We thought there was a need for innovation in this space, and we thought that we had the appropriate experience and market knowledge from our prior roles to be able to build those processes and services that could do large-scale risk reduction across the market in an efficient way," says Quantile chairman and co-founder, Stephen O'Connor.

In the compression business, one feature winning plaudits is the so-called standardised risk replacement approach, which unwinds a large number of offsetting swaps and rebuilds the risk exposure of the portfolio by putting on new standardised hedges.

In a typical compression run, offsetting trades are recognised and torn up in such a way that there is no change in the risk of the portfolio. Risk-constrained compression, offered by all the major providers, allows participants to tear up a large number of trades by adjusting multiple trade characteristics – including cashflows, floating leg spread and interest rate delta. Users receive an optimised swaps portfolio, but one that may not exactly match the risk profile of the original.

Image: Geraint Roberts

Andrew Williams (left) and Stephen O'Connor

Quantile goes a step further, allowing banks to put on standardised hedges with initial margin model date maturities and standardised coupons to rebuild the risk of the portfolio to the original level. According to Williams, this is more aligned with how banks bilaterally compress.

"When banks compress with another bank, you would typically try to unwind a set of trades and rebuild the risk on a smaller set of new standardised instruments," he says.

The standardisation creates a larger pool of offsetting trades for future compression runs, making it easier to manage the risk of those standardised trades.

"If we can unwind trades and rebuild the risk down to standard points, managing those positions going forward may be cheaper from a reset risk management perspective and just generally for future compression as well. The risk replacement is about standardising the book, making it cheaper and easier to manage on an ongoing basis," Williams adds.

Bank clients welcome the approach. "It is actually something we have been asking compression providers for some time. It homogenises the book," adds the clearing expert at the US bank.

In the non-cleared space, clients say Quantile is ahead of the curve, particularly with its risk optimisation solutions intended to reduce initial margin for bilateral exposures. Quantile provides optimisation services for 24 dealer clients in non-cleared rates and forex derivatives.

In 2018, Quantile pushed the asset class boundaries, expanding its optimisation service to equity derivatives, where it runs regular cycles including one per month for G-15 banks.

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Despite an overwhelming focus the industry has placed on fixed income optimisation to-date, some dealers argue that **equity derivatives actually drive the largest amount of initial margin** under the industry's standard initial margin model (Simm). That has driven rapid uptake.

"We saw total margin postings or requirements across the equity products steadily increase since the margin rules went live. So that has become an important part of our full service offering in the initial margin space," says Williams.

He says that across asset classes, the optimisation service is currently reducing total initial margin by "billions of dollars" on a weekly basis.

Competitors have followed suit. TriOptima also has equity optimisation capabilities, but dealers say participation is higher at Quantile, making the provider a preferred partner for clients seeking a combined service across rates, forex and equity.

"On day one, we built our model in a way that it can handle different asset classes, and I guess we are reaping the benefits of that now," says Williams.

The start-up was the first to provide **counterparty risk reduction services** through industry margin hub Acadiasoft, helping banks reduce initial margin after non-cleared margin rules went live in September 2016. Under the rules, in-scope entities are required to post initial margin calculated to cover counterparty exposure over a 10-day holding period to a 99% confidence level. Market participants estimate the cost of funding this margin to total $1 trillion.

Flexibility is another feature winning praise from customers. Clients can pick and choose the features they want in their compression run. For instance, if a bank is not ready to book new risk replacement trades yet because it is a new process for them, they can compress without that. Banks can also choose which standardised tenors they want to use for their risk replacement hedges instead of using up all of the available tenors.

"We don't prescribe how many curves should be used or how you represent your risk. We are looking really to get the client's representation and making sure we can build a constraint process that can manage the compression in a way they wanted it to work," says Williams.

The vendor also has plans to leverage the flexibility of risk replacement hedges, with a future service that would allow clients to rebuild the risk through an entirely different set of products. For instance, a bank could unwind forward rate agreements and put on new risk in listed futures.

In keeping with that theme, one key issue the vendor will be focusing on in the future is compressing swaps across multiple CCPs.

"One of the areas clients are also looking at is they want services that can help them reduce risks across multiple CCPs, so that's an area of focus for us as well," says Williams.