How derivatives management is changing post-Covid-19

Risk.net explores five derivatives trading themes discussed by experts in a recent webinar sponsored by Numerix

Today's derivatives traders face many challenges as regulations change and the market becomes more complex. At the same time, digitalisation and new technologies are breaking down the barriers to entry, and existing players can expect disruption. In a *Risk.net* webinar sponsored by Numerix, experts discussed changing approaches to collateral management, the challenges of post-Libor valuations, and how firms can achieve a more focused view of transactions and risk. This article explores five themes that emerged from the discussion.

THE PANEL

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1. The impact of the Covid-19 pandemic on collateral management

The most immediate impact of the pandemic on collateral management was from the huge increase in trading volumes. The webinar panellists noted that this resulted in a steep rise in initial margin held by custodians. In addition, increased market volatility has led to more margin calls and collateral being posted on a bilateral basis at central counterparties (CCPs).

As a result, custodians became more focused on collateral optimisation and liquidity. But the expansion of collateral conditions applied by CCPs and the changes in rates are things they are used to managing. Collateral optimisation is not just about exchanging one currency or asset for another, depending on the conditions applied by the CCPs. Custodians normally make a choice of allocation based on the type of collateral they consider the cheapest. And they still distribute their collateral deposits in the same way. According to the panel, their approach had not really changed.

However, the increase in collateral movements has highlighted a few key areas for custodians to improve on, including the important role of technology in the new home-working environment. The experts said access to fast and reliable information on exposures and settlements is critical for custodians now that their workforces are dispersed.

2. The Libor transition and increased complexity in valuations

The complexity around the valuation framework has increased with the Libor transition – the panellists expressed concern around the maturity of the alternative reference rate (ARR) market. Financial institutions are obliged to transition their portfolios to alternative risk-free rates, but there is currently not enough liquidity for certain ARR-related products, such as swaptions and caps/floors.

The complexity also presents a particular challenge for market-makers. Participants explained that, in the past, when traders wanted to evaluate a deal, they were only concerned with the risks to their own portfolios. They now need to consider other factors that will affect their true profit and loss, such as collateral and regulatory capital, which can play a key role in transactions.

Traders are now taking a firm-level view of the profitability of each trade. They are taking the margin cost for managing exposure rates into account as well as the required reserve of regulatory capital for doing a trade. Before traders put their prices to counterparties, they are factoring in losses and making price adjustments accordingly. Many traders are achieving this using powerful computational software, but performance is even more challenging than usual.

3. Regulatory changes and rising transaction costs

Regulatory capital requirements for over-the-counter (OTC) products are becoming more stringent, including for market risk. For example, timelines for Basel III are nearing for counterparty liquidity risks. Panellists also noted that the standardised approach for counterparty credit risk and the revised credit valuation adjustment risk framework are already under way. So, transaction costs are increasing but margins remain unchanged. To stay competitive, firms are finding ways to manage transaction costs more effectively. First, they are assessing the impact of moving away from Basel 2.5 to the Fundamental Review of the Trading Book (FRTB) guidelines on market risk capital. Until recently, there was no distinction between risks for two interest rate products with the same duration. However, with the upcoming adoption of FRTB, the risks and resulting capital requirements differ significantly. For example, Libor-rated group products have less capital than constant maturity swap risk products because they have much longer risk.

Traders are leveraging digitalisation to assess the potential regulatory costs of transactions, which gives them a better view and helps minimise these costs. They are moving away from simplified parametric approaches to capital calculation to more robust scientific or simulation-based approaches that offer comprehensive valuations of entire portfolios. They are using what-if scenarios for capital optimisation. This enables them to reduce their use of capital by redistributing their portfolio and reallocating their position between different branches or different assets. They are also using them to compare the differences between the standardised and internal models approaches.

Linus Yu, Numerix

4. The opportunities in digitalisation of derivatives trading

Banks and securities firms are starting to pay more attention to a new world of decentralised finance with the advent of blockchain technology. Panellists remarked that cryptocurrencies and the tokenisation of assets on specific blockchains enables a wider group of securities firms, individuals and brokers to interact and make the same transactions a traditional securities broker would make.

Some CCPs are already piloting blockchain technology in certain asset classes, which could potentially funnel down and make a significant impact in the derivatives trading space. Participants believed this trend is in its early stages, and it may be five to 10 years or more before it hits the mainstream. Due to its potential to disrupt business, firms are watching this space carefully to ensure they have a foothold as and when it takes off.

5. Risk management technology for a complex market

As regulations change, more structured products are being developed and banks will need to reassess how they calculate potential future exposures. The panel explained that, except for a few large global banks, many still use table-based approaches, which may not be appropriate for non-linear products. So firms may need some simulation-based approaches to account for non-linear risk. This should enable optimal calculations for exposure management.

In accordance with global uncleared margin rules, more firms will have their standard initial margin models up and running over the next 12 months, requiring significant investment to automate the process. This is expected to act as a catalyst in terms of how exposures to OTC counterparties are assessed.

The derivatives experts noted that firms are building their capacity to be able to analyse patterns when algo trading starts to gain pace. And they are capturing some of the trends for foreign exchange or interest rates on the bond market to ensure prices are aligned with the market and that price discovery is still being respected.

Automation of the transaction process – limited to things such as request for quote and price negotiation – is not enough, the panel explained. Firms now have the capacity to monitor and factor pre-trade transactions and post-trade risk into the process. They are using streamlined processes and technology that allows them to analyse transactions and risk in one place.

Firms also need to anticipate changes by capturing and analysing news and social media outputs. They are using sophisticated market research monitoring systems to build robust frameworks for early warning indicators into their portfolios.

In summary

It is difficult to know what is around the corner when it comes to inflation, market risks, digitalisation and new technologies such as blockchain. The Covid-19 pandemic set a precedent for disruption and opened the door to many new players in an increasingly complex market. To survive and manage new risks, firms must embrace change and leverage technology to build agile frameworks and strong controls. Opportunities will continue to open, but the challenges are not going to disappear. One thing to conclude from the discussion is that 2022 will be a dynamic year for the derivatives market.

>> Register to watch the full webinar, *Transforming treasury and derivatives management post Covid-19*, at *www.bit.ly/31oafHM*

The panellists were speaking in a personal capacity. The views expressed by the panel do not necessarily reflect or represent the views of their respective institutions.