



Structured notes

Transforming risk into opportunities

Global markets have experienced a period of extreme volatility in response to acute concerns over the economic impact of the Covid-19 pandemic. Numerix explores what this means for traders, issuers, risk managers and investors as the structured products market reshapes to fit the changing market environment

THE PANEL

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Structured products, as with all markets, were hit by the Covid-19 pandemic, which resulted in wild market swings, increased volatility and a slashing of interest rates globally.

As a result of the pandemic, regulators restricted seven Euro Stoxx 50 companies from making dividend payouts, while at least another 10 made the decision to do the same, including Airbus, InBev, retailer Inditex and eyewear company Essilor Luxottica.

These cancelled dividends hit the big autocallables sector for structured products, which made up 60% – or \$150 billion – of the \$250 billion issuance of structured products during 2019. Autocallables rely on dividends as a guaranteed cashflow and the current year is typically not hedged. A decrease in dividends or their outright cancellation would make autocallables less attractive as investments as that guaranteed cashflow shrinks.

Seen as a way to make bigger gains while simultaneously capping losses, structured products have a diverse array of instruments. However, autocallable notes have become increasingly popular in recent years as low volatility and low interest rates have persisted since the last financial crisis that began in 2007–08.

As volatility spiked and the dividend domino effect began to tumble, banks have suffered mark-to-market losses in these products. As reported by *Risk.net*, Natixis revealed €130 million of dividend-related markdowns in its structured products book, resulting in its equity trading unit suffering a €32 million loss.¹

Other French banks were also hit. BNP Paribas and Societe Generale

previously reported losses of €184 million and €200 million, respectively, from cancelled dividends in the first quarter of 2020.

The full impact is still to play out in the marketplace, but experts remain confident there are opportunities in Europe despite increased volatility and changes to working environments as professionals and clients work remotely.

Pandemic impact

For some clients, there has not been a withdrawal from the market – in fact, quite the opposite. In the first eight weeks of the pandemic, for example, Natixis saw significant inflows from institutions, according to Pierre Moretti, global head of equity financial engineering and cross-asset indexes at the French bank.

“Many of our institutional clients traded through the market panic, either putting in place new protection schemes or monetising gains on existing structures,” he says.

A lot of structured products are also expiring in 2020, so Natixis has been busy extending the maturity of these products to give them more time to recover.

On the retail side, however, the story has been different. The global shutdown has impacted the foot traffic into local banks and, in turn, the retail campaigns banks run for structured products. “We slowed down drastically at the beginning,” says Moretti. “Inflows are down, but statistics from last week reveal the main European life insurance companies don’t show massive outflows, so it was just temporary.”

Natixis has urged banks and life insurance companies to adapt by postponing campaigns and restructuring the products so that the start date is extended in time. This allows the firm more time to reach clients.

Conversely, activity in the high-net-worth space has been quite active. “A lot of clients are looking for entry at those equity levels, often on protected solutions where they are probably fearing a double-dip, so they are looking for safer products. The good news here is that banks at the moment – and, generally speaking, the industry – have funding spreads that are allowing us to structure capital-guaranteed products. That was not really the case before the pandemic crisis,” says Moretti.

¹ *H Bartholomew (May 2020)*, Pressure grows on structured product issuers as losses mount, www.risk.net/7541296

For Ross Trotman, who sits in the cross-asset solutions product strategy team at Citi, retail customer volumes in the private placements sector “have been strong” despite the challenges the broader structured products market has been facing.

“We’ve seen high levels of issuance year to date, in private placements particularly. We’re demonstrating that, if manufacturers are responsive, we’re able to take advantage of market moves such as volatility upticks and widening credit spreads – and so issuance volumes and numbers of trades have increased,” he says.

Like Moretti at Natixis, Citi’s Trotman has seen some differences in client behaviour as the pandemic has unfolded. The bank saw a number of clients unwinding or restructuring existing hedges that were showing positive mark-to-markets.

“We’ve seen some adjustments in client behaviour as the Covid crisis has developed, such as executing over-the-counter solutions, unwinding positive mark-to-market positions and harnessing volatility where it suits certain strategies – by retail-facing intermediaries in particular,” says Trotman.

Citi’s equity derivatives team has also been busy, as clients put hedges back on as markets recover, with clients fearing a second wave of the pandemic.

Working from home – a prerequisite for virtually everyone in the market – has also changed the dynamic of how structured products professionals operate with their technology solutions. For example, handling market data in a period of extreme volatility and working remotely has presented its own challenges.

“There were obviously a lot of problems and, with respect to market data and handling market data problems, that can sometimes be quite tedious. So we had to step in and help our customers quite a bit,” says Ilja Faerman, managing director, client solutions, for Europe, the Middle East and Africa at Numerix.

While participants have done their best to adapt to the Covid pandemic, market forces have taken on a strength of their own, which has been difficult for banks, in particular, to handle.

Even before the pandemic, the surge in autocallable issuance had presented tough risks for banks to manage. Hedging costs have been expensive and this makes it difficult to price these products competitively.

Autocallable products tend to track equity indexes or baskets of stocks and deliver above-market coupons, all as the spot remains wedged in between upside and downside barriers. The note has a ‘knock-in’ when the spot strikes the upside barrier, which in turn means the client gets its principal back as well as a better coupon. But, if the downside barrier is hit, a put option is triggered and investors can lose some of their initial investment, although that barrier is generally set at 40% below the initial index level.

Some French banks have used alternative risk transfer trades to help reduce the risks for themselves by portioning off that risk to hedge funds in the form of volatility exposures, which can move violently in periods of economic stress.

“This concentration concern had led to the rise of new business that has been put in place by the majority of structured products providers, which is called alternative risk transfers. These techniques transfer these risks from the bank to hedge funds and other fast-money investors and, more recently, real-money investors,” says Moretti.



This helps reduce some of the risk in longer-dated dividends, but many issuers leave the current year’s exposure unhedged. That may be changing now, as *Risk.net* reported that Societe Generale is looking at whether it would be worth hedging this front-year dividend risk.² But the increase in hedging costs as a result of concentration in autocallable notes makes it harder to be price-competitive.

“If a concentration has led to a change of hedging costs, it makes it difficult for providers to be as aggressive as they used to be because the trading management of those correlations and of those parameters are changing the way those structures are priced,” says Moretti.

What did not help was a complete evaporation of liquidity and market data across a number of product segments, including total return swaps, vanilla options and even the underlying spot products, too.

“Clients rely on implied volatilities from market data vendors,” says Numerix’s Faerman. “They were, unfortunately, hit quite badly because the data doesn’t come in very frequently. It’s also not always very transparent what kind of methodology the data vendor is using to imply the volatilities basically from option prices.”

Those constructing volatility surfaces themselves had more of an understanding about the market and were able to mark their books so, even if there were losses, they could at least measure to some degree what they were.

For smaller customers, that was more of a challenge because computing those option-pricing formulas was impacted given the lack of market data and extreme volatility, meaning they took more time to be calculated.

“For smaller issuers, it’s usually coming at a cost, because computing these cross-sensitivities actually takes more time to gain more confidence about your hedge and that your hedge is correct, and also ensuring that the profit-and-loss swing will be smaller,” says Faerman.

For some firms, the increased volatility was an opportunity to lock in trades for some clients. Harris Gore, head of financial products at Investec Bank, says his institutional clients took advantage but the expected panic in the retail market never arrived, as a result of having a more conservative opportunity.

“We favour a much more conservative product in that market, meaning that, throughout the crisis, we stayed far away from those dips. We didn’t see any panic among our clients,” he says.

² H Bartholomew (April 2020). How axed dividends left SocGen in a €200 million hole. www.risk.net/7537266

Covid-19 – Changing the tide

As with many watershed moments, the thinking and strategy from clients has begun to shift as the market enters a new paradigm.

Heading into the Covid-19 outbreak, one of the main topics among clients in the structured products space was where the market was in the economic cycle, which led to discussions on value versus growth and cyclical versus non-cyclical considerations.

However, those key topics have now changed since the onset of Covid-19, says Citi's Trotman. He sees stock selection from clients around specific pandemic-related themes, such as working from home.

Despite some headwinds for the wider autocallable market, Trotman views those as still being a big part of clients' portfolios in the future.

"Turning to autocall structures: they were before and will likely continue to be a key product for many clients. Some European markets are more concentrated in autocall structures than others, but across the board we see ongoing client requests to quote on customised and tweaked variations of this popular structure."

Considering the concentration issues and subsequent increased hedging costs for issuers, diversification has been heralded as a key theme to help reduce those costs. While always a popular product, if that is all that's being sold and just on baskets of stocks, when that market is impacted it will be difficult to offset those losses with something else.

Investec's Gore says, pre-crisis, his retail clients would place 70% of investments into capital-at-risk autocall products versus 30% into the more conservative structured deposits and capital-protected products. However, that has now completely inverted.

"Obviously, we're quite new into the crisis – or we're only a couple of months into what could be a completely new world – but we've seen a switch from that ratio a few months ago to 70% of our flows now being into structured deposits, which are really a cash enhancement type product and a massive downsizing of the flows into our capital-at-risk products in the retail space," he says.

Gore attributes this to the less competitive pricing that banks can give in these products as they price more aggressively to cover hedging costs that continue to go up. That has helped simpler, less dynamic products pick up since the pandemic.

The impact of credit spreads have also been a factor, which have rocketed since the crisis began. Interest rates have been low for some time – especially in Europe and Japan – and moves lower by the US Federal Reserve and the Bank of England have had less of an impact than the credit spread widening the market has witnessed.

Other changes are happening, too. Restructuring of current issuance has already happened from a maturity perspective, but a restructuring of notional has also been occurring to protect the original notional. This involves offering a product where the present value of the product is similar to that of the current note, which might be experiencing issues due to the recent crisis.

Another example is a soft call product, which is proving popular in Switzerland. These products allow a bank to have the option to call back the product – different from an autocallable note, which happens automatically. For the bank involved, these features can be a lot more difficult to price as they require advanced Monte Carlo techniques.

Some trends that were already under way pre-Covid-19 are likely to continue. Structured products funds, for example, help clients wanting to replicate their asymmetrical payout profiles that you find in capital-at-risk and capital-protected products, but in a unitised fund format.

The advantages include not having to keep up to date with the various tweaks and payout profiles that are brought to the market, while it can fit into a fully balanced portfolio and into the various technology and risk systems that clients use to model their underlying portfolios.

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Ilja Faerman, Numerix

"We have seen an increase in structured products funds, and I think that trend will continue," says Investec's Gore.

Gore says in the institutional space there has also been a growing trend among clients to use strategic equity or collar strategies as part of pension funds' liability-driven investment strategies.

"We expect that trend to grow because what we've seen through two crises now is that your traditional diversified portfolio often fails to give you any kind of downside protection during a crisis, and more and more clients turning to outright protection as a means of diversification," he says.

Increasing digitisation

One of the outcomes of the Covid-19 pandemic may be an increased reliance on technology in the structured products market, according to Numerix's Faerman.

He believes the use of graphics processing unit technology and Elastic Compute Cloud engines are becoming the norm as people's reluctance of doing calculations in the cloud is dissipating – particularly given the new work-from-home environment. This also extends to microservices-based architectures.

"This does help, actually, to reduce the technological entry barrier level to get into the structured products business. So we see quite a few regional banks and different jurisdictions entering the market without massive investment on the IT side because they can benefit from these new technologies," says Faerman.

Other areas of development include multi-dealer platforms for clients – particularly in Europe and the US. In Asia, this has already been a common feature of structured products markets.

There is not a huge amount of standardisation yet, according to Faerman, but despite the work involved in connecting those different platforms, he says it is still "manageable".

"The platforms certainly have up- and downsides for our customers. The margins are getting driven down because of the transparency and this also forces our customers to be more efficient through increased automation," he says.

Despite the challenges Covid-19 has thrown at the structured products industry – particularly at the autocallables sector – there are signs the market may have weathered the worst of it.

Many customers were still able to make necessary changes to their portfolios despite the surge in volatility and the challenges that came with working from home for many market-makers.

Diversification in product sets and an increased use of technology as hedging costs increase for the banks will be key in making sure clients are able to continue getting the best return out of structured products in the future.

>> Listen to the full webinar, *Structured products – Transforming risk into opportunities*, at www.risk.net/7544361

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.