XSG case study

Establishing a strategic partnership for ESG modelling

"In 2014 we set out to optimise our ESG process both for real-world and valuation scenarios, seeking a solution that took into account recent regulatory developments, the specific requirements of the Group's internal models and that was cost effective", says Michael Messow, Head of Quantitative Risk Modelling at Baloise.

Baloise was keen to establish a strategic partnership with an ESG provider. In addition to regular support during the calibration process, Baloise sought flexibility in respect of future regulatory change and potential new areas of application for the ESG. Working with an ESG provider that could deliver in-depth technical knowledge was as important as the software itself.

"Our development model is built on a collaboration with clients and we were delighted when we were awarded the ESG tender with Baloise", says Gabi Baumgartner, a director in Deloitte who heads up the team who develops XSG, the Capital Markets Group. "We speak with them on a regular basis and are always keen to hear their feedback on XSG; the new features they'd like to see, how existing tools might be enhanced and the methodological questions that they identify. Coupled with our own ideas and vision, XSG continually evolves to meet the needs of our clients and the marketplace."

Baloise uses the XSG software to generate scenarios from both risk-neutral and real-world models, which are then used in its half-yearly MCEV, Solvency II and SST reporting processes and monthly internal monitoring updates of key financial metrics. Baloise's team carries out the full ESG calibration process itself, with Deloitte's team of experts being on hand to assist with any queries that arise. For example, in the course of the monthly updates carried out between Q1 and Q2 of 2015, issues related to the negative interest rate environment in the Swiss economy have made the calibration of risk-neutral interest rate models particularly challenging; some ESG models employed by other market participants cannot handle negative rates, and those that can typically struggle to fit to the set of Black implied volatilities of market-traded swaptions in such extreme environments.

"The Q1 2015 calibration of the Swiss economy was challenging", says Michael. "We contacted the Deloitte team and relayed our experience in calibrating the interest rate models to the market. They listened to the issue and promised to research a solution. By the next quarter we had an enhanced version of XSG that delivered exactly that. The updated version offered the option to calibrate to the normal volatility of swaptions - a metric which is well-defined even in the presence of negative yields - and thus produced a much more reliable calibration displaying improved goodness of fit compared to standard calibration methods. The team at Deloitte also delivered a number of research papers highlighting the issues that we (and others in the market) had been seeing. This was a tremendous help in understanding the problem at a fundamental level and a demonstration of the strategic partnership that we have with Deloitte".

Deloitte.

Baloise Group