

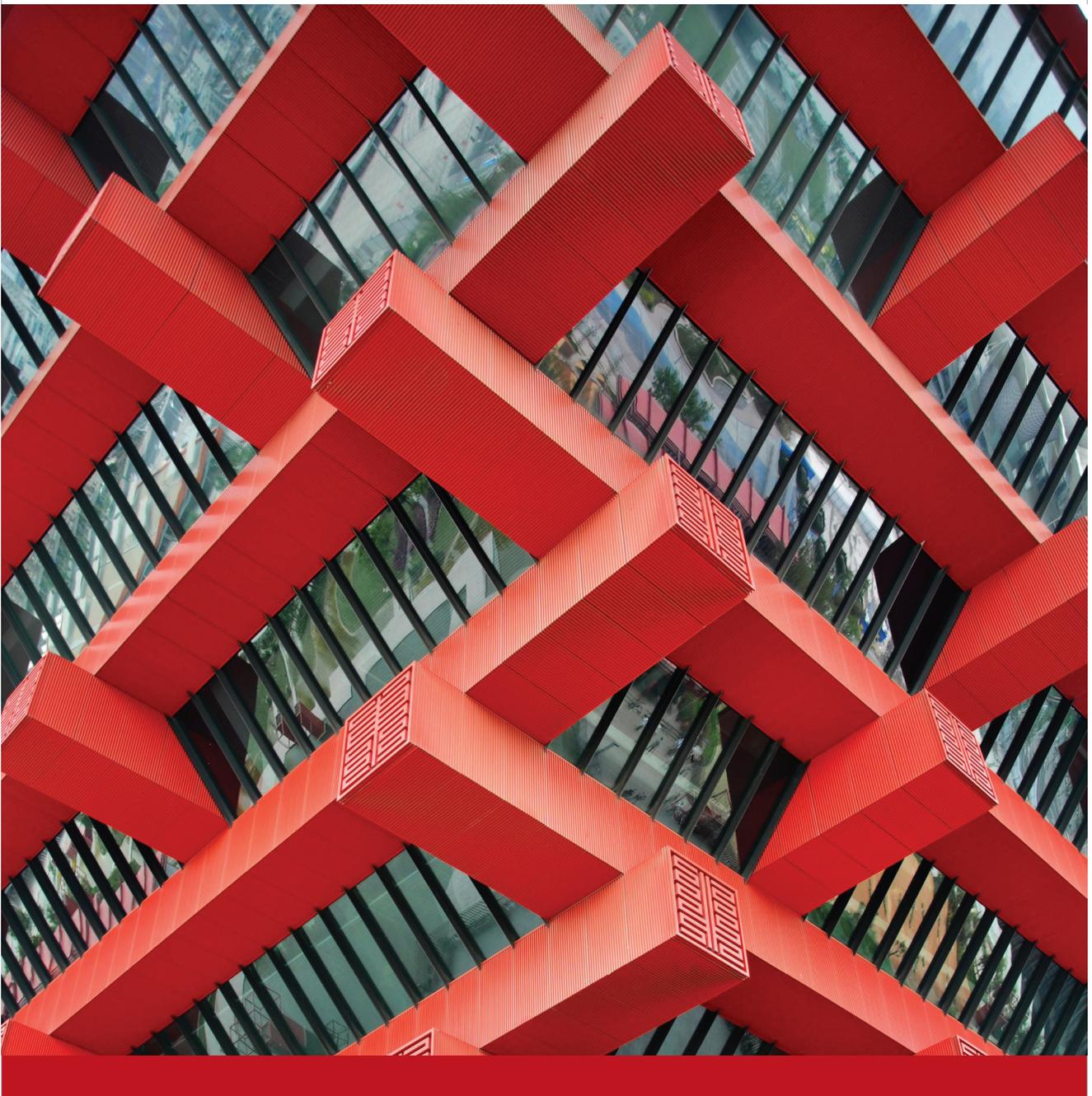


**Structured
products**

Asia Awards 2013

Technology Innovation of the Year

SEPTEMBER 2013
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Structured products

Asia Awards 2013

> The fact that banks need to accommodate investor desire to hedge and trade China's offshore renminbi (CNH) is a message that came across loud and clear in the submissions and interviews for this year's *Structured Products Asia Awards*. Structures and trades based around the Chinese currency appeared frequently in pitches, not just in the foreign exchange category. Product structurers across the region have embraced the CNH, especially on behalf of their investors from the US and Europe who are looking to include this appreciating currency into their trades.

Similarly, Taiwan is re-emerging as a fascinating market for derivatives, particularly in the insurance sector. The country's investors remain pretty sophisticated and are certainly enthusiastic when it comes to putting their money in new and interesting ideas. Barclays, winner of the Taiwan country award, highlighted this appetite for structured products, having succeeded in capturing thousands of new customers on the island this year. Société Générale, the house of the year winner, also impressed with its innovation in Taiwan as well as the breadth of ideas it was prepared to show to investors. Hybrid structures with forex and equity-linked structures helped secure the French bank a large market share in most countries in a region where it has expanded its presence as others have departed, or at least cut back their operations.

Société Générale has continued to make good money in Japan, a country that has been the talk of the town this year with its rising equity market. When not making more cash from an involvement in Japan's variable annuity market, banks have been quick to seize on exploiting the equity and forex dynamics to provide investors all over the world with hybrid products that offer attractive yields.

Both the number and quality of the pitches for this year's awards have been as high as ever. Banks were especially keen to compete in the house of the year, equity derivatives, interest rates and foreign exchange awards.

Structured Products would like to congratulate the winners and thank all of you who competed in this year's awards. Also a big thanks to those who provided the client feedback that helped us to make the right decisions.

Richard Jory, Editor

Awards write-ups were compiled by Richard Jory, Vita Millers, Yakob Peterseil, Jonathan Lopez and Clive Davidson

Technology innovation of the year



Numerix

> Coping efficiently with the demand for quotes on equity-linked notes requested by email has always proved difficult, due to the non-standard format of the emails and the challenge of quickly pricing the complex instruments. Similarly, counterparty credit risk associated with derivatives has recently become far more complex, challenging both the modelling capabilities and computational performance of traditional pricing and risk systems. Meanwhile, as issuers try to respond to investors' search for yield in the global low interest rate environment, they require ever greater speed, accuracy and flexibility of pricing and risk analytics.



Steven O'Hanlon

New York-based Numerix has made a number of enhancements to its software over the past 12 months that address these issues. For example, it introduced an auto-pricing facility for the Numerix CrossAsset analytics system, whereby it can take in email requests for quotes for equity-linked notes in any format, automatically interpret them, calculate prices that take into account all the relevant risk factors and feed the prices back to the client almost instantly. Singapore's DBS Bank is one of the first to use this functionality.

In March, Numerix introduced the Numerix CrossAsset Server – a platform that provides a grid computing-based high-performance environment for its CrossAsset pricing and risk analytics. Numerix CrossAsset includes functionality for calculating credit valuation adjustment (CVA) and potential future exposure (PFE) for counterparty credit risk management, as well as the funding cost of instruments in terms of collateral and regulatory capital. This functionality has proved of particular interest in Japan, China and Taiwan, where institutions are keen to set accurate counterparty limits, says Steven O'Hanlon, chief executive officer of Numerix. A recent innovation introduced by Numerix is a technique to accelerate the computation of exposures and CVA and PFE for large portfolios of interest rate swaps, forex forwards and cross-currency swaps, whereby the cashflows of a portfolio are aggregated to represent a 'superswap', making the calculation much faster, the company claims.

"In the Asia-Pacific region, we have also focused on scaling our hybrid modelling framework to better serve clients' counterparty risk management needs," says O'Hanlon. By employing new American Monte Carlo techniques (also known as nested stochastic or stochastic-

on-stochastic simulation) under its hybrid framework, Numerix allows users an almost unlimited number of total model factors, as well as permitting a wide selection of models for each risk factor. The company has signed up 34 new clients and technology partners in the region over the past year, particularly in Singapore and Australia.

One Japanese bank chose Numerix CrossAsset Advanced Risk to calculate PFEs for complex forex, interest rate, credit and equity-based products. "Numerix CrossAsset Advanced Risk is able to meet our performance requirements in terms of computing PFE for our entire portfolio within a matter of hours," says a risk manager at the bank.

A Taiwanese bank uses Numerix CrossAsset Excel for pricing the interest rate, credit, forex and commodities structured products it issues, as well as for verifying the valuation of deals it transacts with counterparties. This year, it adopted the Numerix CrossAsset Integration Layer, which it says makes it easy to extend CrossAsset with custom interfaces, new models and business logic. The bank is building its own graphical user interface and trading screens, using the Integration Layer to interface with CrossAsset as the calculation engine. (The Numerix CrossAsset Integration Layer also enables pricing and analytics to be run in a high-performance computing cloud to supplement in-house computation if required.) In addition to the ability to integrate Numerix's analytics engine, the key to the bank's choice of the company's software was the accuracy of its pricing and valuations, as well as the software's flexibility, which allows the bank to tailor its own products. "We can use the Numerix software to customise and price for ourselves any product structures we want to trade, without having to rely on the software company to make the changes for us," says the head of structured products risk management at the bank.

As well as adopting the new auto-pricing functionality to automate its response to email requests for quotes for equity-linked notes, DBS uses Numerix analytics across asset classes for structuring, pricing, valuation, hedging and risk management. The speed and scalability of the software and the ability to calibrate the pricing and risk models are the major benefits, says Calvin Yeap, head of equity derivatives trading at the bank. In addition, the company's exceptional technical support has also proved a major advantage. "Numerix has also been willing to listen and really work with us on customisation," says Yeap. ●