Fintech Report 2016

SRP

Consulting

Move ahead of the competition

We help companies sharpen their competitive edge every day. With offices in London, Sofia, New York and Hong Kong, and the most efficient teams of multilingual analysts, who else better than SRP to give you impartial and objective intelligence to understand your position?

Growth

How good is my sales team? How are they perceived? What do my clients really think? How do I grow my franchise? How much of the market is tied distribution and how much is open architecture? How do I work with regulators to promote structured products in a sustainable and compliant manner? How do I improve my brand?

Performance

How should I measure client satisfaction? Is my sales team positioned for success? How do I manage my reputational risk? How do I automate without sacrificing fee income/profit? What are my revenue/profit sources? What is my market position/share and how do I improve it?

Efficiency

Can I cut out any unnecessary steps to streamline origination through to execution on deals? Am I measuring my team's performance correctly without bias? Is there a sector where I haven't edged? How do I take advantage of legal? How do I harmonise my systems across borders and jurisdictions? Am I maximising tax efficiency vehicles for my clients? How will ideas be generated in the future? What Big Data and technological innovations should I be looking at?

SRP can help you connect the dots.
We can survey the market on your behalf and use our expertise to help you put together a business case or study.

Foreword

Financial technology for structured products providers was taken to a new level in 2015, with the development and establishment of multi-dealer platforms, trading venues that ultimately promise the provision of products from all providers and instant delivery to all distributors. We have not reached the age where this kind of platform technology has been made openly available to all retail investors – whatever their level of worth – but the progress of last year is certainly a start.

New inventions or ways of operating always attract a mass of companies looking to step in and take advantage of the need and establish a first mover advantage. As ever with structured products, this opportunity has not presented itself as being quite so clear cut. In the first version of dealer platforms, the single-dealer variety that were created for private bankers who gained the ability to talk to their wealthy clients and tailormake structured products instantly that would fit with their desires.

It has taken years before the advance from single-to multi-dealer could take place, and it is by no means the case that this way of operating is as widespread as its promoters would have you believe. The holdup has been due, in part, to the dichotomy of thought, split between expanding single-dealer platforms by adding a few or eventually maybe many new issuers, and starting with a platform that would accept multiple dealers on the one side and multiple private banks, or even distributors on the other.

What it boils down to is, do you want a bank running the platform – which is the way to go from the single dealer start – or is it better to hand the process over to a technology company? While the first lacks the kind of secrecy that banks tend to like, especially when private banking is at play, the technology company option will always include the fear that there may not be enough money to recover or fix where required.

All of this comes along at the same time as regulation has forced banks to invest more money in technology, to meet copious requirements for more transparency and order. Add to this the cost benefit of incorporating technology into straight-through processing and it is easy to see while now is a good time to be a technologymonger, if you get it right, that is.

In this report, we look at the work issuers (investment banks) have done to automate their businesses, streamline their processes, lower the costs and raise the value in the context of presenting new product opportunities to their clients (especially private banks and fund managers), as well as what private banks are doing to accept the increased volume of products being launched and the smaller ticket sizes which challenge the capacity of automation.

Introduction

Structured Retail Products Limited (SRP), part of the Euromoney group of companies, is a research firm based in London, New York, Hong Kong and Sofia, providing research and training services related to all aspects of structured products.

The company was founded in 2001 and our clients include hundreds of blue chip companies from around the world including all of the major global financial services groups, financial regulators, stock exchanges, index providers and professional services firms.

SRP also owns and maintains the specialist industry website StructuredRetailProducts.com. The site was launched in January 2003, and has become the leading online information resource for the global retail structured products industry. With over 4,100 registered users and more than 12 million product listings, the website is the primary information source for a wide range of businesses involved in the manufacture and distribution of structured investment products globally. The service is used by financial regulators, index providers, investment banks, stock exchanges, retail banks, insurance companies, asset and wealth managers, consultants, lawyers and other firms involved in the market.

Copyright information

Indemnity

Contents

Editor: **Richard Jory**
Assistant editor: **Pablo Conde**
Contributor: **Farah Khalique**
Marketing: **Margaux Palacios**
Sales: **Kris Deslagmeulder, Raul Enciso**

If you are interested in having a similar bespoke report produced for your organisation, please contact **Kris Deslagmeulder, +44 207 779 8201** or email **Kris@StructuredRetailProducts.com**

Platform Timeline

OCTOBER 30, 2014

UBS to launch Asian e-platform

UBS unveiled plans to launch an e-platform for financial products in Asia-Pacific targeted at private banking and institutional investors to deliver better investment solutions and maximise its technology capabilities. The Swiss bank plans to roll out an e-platform for investment products, according to Bryan Crawford, head of UBS's institutional solutions group.

The new electronic trading platform targeting private banking and institutional investors was launched in the second quarter of 2015. UBS pointed to the rapid development of e-commerce in China, highlighting the recent move by Alibaba, the biggest e-commerce company in China, to develop an online banking platform for investors to purchase wealth management products via its online payment system Alipay. "We have seen 28% of our average client portfolio, including direct equities investment, funds, exchange-traded funds and other listed securities investing in the technology sector and still they constantly come to us looking for more solutions," said Crawford.

FEBRUARY 11, 2015

Vontobel posts 10% profit rise, plans Deritrade expansion

Vontobel reported a net profit of CHF134.5m for 2014, and said that its Deritrade platform for structured products continued to drive sales and had become a "model of success" following the introduction of UBS as a major third-party issuer on the multi-issuer platform, alongside Deutsche Bank, Morgan Stanley, Société Générale and Zuercher Kantonalbank, which joined Deritrade in October 2014. The issuers plugged into Deritrade collectively represent more than 70% of the exchange-traded volume of structured products in Switzerland are now grouped on a central marketplace, stated the bank in its results release.

"A total of 300 financial intermediaries (banks and investment managers) currently use Deritrade to structure individual products that are tailored to their clients' needs," stated Vontobel. The Swiss bank also confirmed hopes to replicate the platform's success in other markets, particularly Germany and Singapore, and has already rolled out its Deritrade platform in the latter.

2014 2015

DECEMBER 8, 2014

New Apac multi-dealer platform launched

FinIQ has launched a multi-asset, multi-dealer connectivity platform for equity-linked and FX-linked structured products. Delivered in association with Thomson Reuters, the FinIQ EQ Connect platform is dealer-neutral and is designed for the private banking and wealth management industry. FinIQ said the platform offers connectivity to top market-makers in the equity-linked space for products such as equity-linked notes, range accruals, fixed coupon notes, accumulators and decumulators, while enabling optional integration with other core banking systems. The platform is powered by Thomson Reuters DataScope Select, which provides a broad universe of cross-asset, intra-day and end-of-day pricing, reference data and evaluated pricing services. Thomson Reuters is also hosting the solution as part of a growing ecosystem of services available within its Elektron Managed Services hosting environment. Deutsche Asset & Wealth Management was the first company to connect to the platform for the distribution and transaction processing of its treasury and wealth management products.

JANUARY 20, 2015

Contineo rolls out first open multi-issuer network for structured products

A consortium of banks including JP Morgan, Goldman Sachs, HSBC, Barclays, BNP Paribas and Société Générale, and technology firm AG Delta have launched a new open messaging network in a move to provide greater access to equity-linked structured products for private banking and wealth management. Contineo's open messaging network provides greater access to equity-linked structured products as well as their counterparties through a web-based interface and a set of open application programming interfaces.

Mark Muñoz

The technology is powered by AG Delta's application architecture and is targeted to go live early this year. Contineo is currently registering private banks and implementing connectivity to issuers, as well as working with other certified third-party technology companies. The new platform will address issues around the distribution and transaction of structured products. The company's goal is to establish a unified communications network using the industry standard Fix protocol and Restful web services, which will be accessible to all participants.

FEBRUARY 24, 2015

SG adds OTC functionality to Alpha platform

Societe Generale added a new OTC functionality to its Alpha electronic trading platform to allow distributors, private banks and wealth managers to price OTC instruments alongside the platform's structured products. The new OTC capabilities were aimed at clients who trade using their own paper or issue their own structured deposits. SG is now in the process of enabling clients to service the whole life cycle of the bank's offering both from a front- and backoffice perspective. "Alpha has a web user interface, and also APIs, and can link directly with clients and also with multi-issuer platforms," said David Wood, managing director, cross-asset sales and head of electronic business at SG. Servicing the full product cycle also includes serving the secondary market once a product has been launched. This includes large portfolios combining different asset classes, maturities. The platform has an optimised price discovery function, as well as post-trade services.

Anup Gupta

MARCH 17, 2015

Vontobel adds four Apac distributors to Deritrade

Vontobel has added LGT, Maybank, KGI Securities and Union Bancaire Privée as the first four Asia-Pacific distributors of structured products to join its Deritrade multi issuer platform. Winning the support from four distributors is a strong endorsement of Deritrade MIP's track record as the leading front-to-back offering in the market, said Anup Gupta, head of Vontobel's Deritrade MIP in Asia Pacific. "With client advisors in Asia spending 10-20% of their time on price finding, Deritrade offers a user interface to enable users to work with clients in real time to develop structures, thereby generating significant cost savings through time efficiency and enhancing the client offering and experience," said Gupta. "The platform in Asia is already available with local payoffs and features, and also offering the Swiss payoffs to interested parties."

MARCH 5, 2015

Contineo adds Julius Baer and opens platform to tech providers

Contineo has added Julius Baer to its multi-dealer platform, becoming the first private bank to sign up to receive prices on structured products. Julius Baer will use the web-based interface to access multiple-issuers of structured products starting in July this year in Asia. "[Julius Baer] will benefit from this industry backed initiative, as it aims to enhance the execution of equity-linked structured products in the Asia-Pacific region," said Roger Meier, head of structured products sales Asia at Julius Baer.

The Hong Kong-based open messaging and price discovery platform expects to bring onboard a number of issuers and private banks before the end of the year, according to Mark Muñoz, managing director of the multi-dealer platform. "We have a huge amount of momentum because on one side private banks are interested in standardising the market and on the other hand issuers are interested in lowering their costs."

MARCH 31, 2015

Leonteq DBS, Avaloq and Numerix to create structured products platform in Asia

Leonteq, DBS, Avaloq and Numerix have agreed to launch an integrated multi-issuer investment products distribution system with the aim of enhancing the offering and distribution of structured products and with the Asia-Pacific region as its initial prime focus. Leonteq said the core differentiating factor of the platform will be the digitalisation of the full value chain to private banks in the investment products arena. The main elements covered in this context are pre-trade analytics, multi-issuer price requests, standardised documentation, trade processing, direct booking and product set-up within the core banking system, lifecycle management as well as post-trade analytics. All these services will be fully automated and integrated into the workflow process through DBS. "The IPDS is the outcome of an analysis of private banking needs and was designed and driven to automate their workflows from A to Z in the investment product arena," said Yann Besnard, head of business innovation and a member of the executive committee at Leonteq.

Yann Besnard

> **"The IPDS is the outcome of an analysis of private banking needs and was designed and driven to automate their workflows from A to Z in the investment product arena.**

APRIL 24, 2015

Contineo implements 'messaging backbone' via Ullink FIX network

Contineo has reached an agreement with Fix technology and network provider Ullink to implement and manage the platform's Fix network in a move to lower costs, increase products access and provide support in all aspects of risk management. Many investment banks, said Mark Muñoz, managing director at Contineo, have connectivity via Ullink today and Contineo wanted to leverage that expertise and time to market. "Ullink has a comprehensive understanding of the structured products industry, and they are already providing services to many of our subscribers," he said. "Ullink provides us with the ability to implement the connectivity of the sell-side with the Contineo platform via our Fix API in a streamlined and efficient manner. We are currently testing [Ullink's] Fix connectivity [which we expect to] be plugged-in in June."

JUNE 2, 2015

國泰世華銀行
Cathay United Bank

Cathay hires Numerix to cope with increasing demand in Taiwan

Cathay United Bank has opted for Numerix Treasurer to respond to increasing demand in the local structured products market. Cathay United Bank was the most active provider of structured products in Taiwan in 2014, with a 27% market share and a sales volume of TWD7bn (US$6.2m). The bank has marketed 45 deposit-based products since the beginning of 2014, and is the most active provider year to date with 10 products, followed by Shin Kong Bank and Taishin Bank (each with four products). Numerix Treasurer automatically generates mark to market (MTM) and Greeks allowing sales to analyse trade details and perform pre-trade scenario analysis. While it used to take half, or even an entire day to obtain inquiry quotes from counterparties, but now a reference price is available in one click, said Tony Kao, senior vice-president of financial marketing at Cathay United Bank, in a statement.

MAY 5, 2015

Rupertus Rothenhäuser

Börse Stuttgart capitalises on Cats acquisition and Euwax reports in pan-European push.

Börse Stuttgart's acquisition of the Nordic Growth Market, the country's second largest exchange, in 2008 kickstarted the German exchange's expansion in Europe. SRP spoke to Rupertus Rothenhäuser, head of marketing and sales at Börse Stuttgart. In April 2014, Börse Stuttgart acquired Citi's automated trading system in a move to create a pan-European market for structured products and a central hub for product issuers. This step has further expanded the services and client portfolio of the German exchange in France, the Netherlands and a few Eastern European markets, according to Rothenhäuser. "Multi-issuer platforms are extremely complementary for our business," said the exchange, pointing out however that there is still no consensus on whether one multi-issuer platform can serve the whole of the market or if there is a need for one in every region. "Only a few will finally last," he says. "Buy-side brokers usually dislike multiple connectivity to various IT systems."

JUNE 24, 2015

THOMSON REUTERS™

Thomson Reuters rolls out pricing tool for structured notes and OTC derivatives

Thomson Reuters launched Pricing Service Plus (TRPS Plus), a new DataScope capability for structured notes and hard-to-value over-the-counter derivatives aimed at increasing transparency into the evaluated price, methodologies and market data associated with the pricing of products. The service is a response to new requirements from regulators enforcing rules such as Dodd-Frank and European Market Infrastructure Regulation, which are devoting attention to illiquid and complex instruments, with a particular focus on derivatives and structured products, according to Thomson Reuters. Financial institutions are struggling to meet valuation and risk management requirements for their exotic derivatives and complex structured products, said Jayme Fagas, global head of valuations and transparency for Thomson Reuters Pricing and Reference Services, in a statement. The service will give providers access to the price but also the traceable details of the valuation 'allowing them clear line of sight into the instrument and its value', according to Fagas.

JUNE 25, 2015

JP Morgan joins Deritrade multi-issuer platform in Switzerland

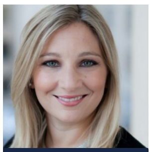
Vontobel has announced JP Morgan as the latest addition to its Deritrade structured products multi-issuer platform in Switzerland following its move last week to expand activities in Asia. The US investment bank will join Deutsche Bank, Morgan Stanley, Société Générale, UBS, Vontobel and ZKB, which account for more than 70% of the exchange-traded volume of structured products in the European country. "We see the addition of JP Morgan as a re-endorsement of our strategy and business model," said Gerhard Meier, global head of Deritrade. "We see [the platform] as a dynamic business with no limit to the number of issuers we can onboard. The goal is to build a comprehensive multi-issuer platform with the relevant market players that brings true price competition and transparency for the benefit of investors."

JULY 7, 2015

Vontobel adds CIC to Deritrade platform in Apac

Vontobel Financial Products has added Crédit Industriel et Commercial (CIC) to its Deritrade multi issuer platform in Asia Pacific, in a move that demonstrates competition in these platforms continues to soar as distributors and private banks in the region seek to reduce operational costs and improve client offerings through automation. The company has been pitching its 'front-to-back' offering to distributors and issuers in Apac on the basis that the platform enables the automation not only the price discovery of structured products, but the entire value chain from the point of issuance to distribution and post-trade life cycle management. Winning the support of CIC is a strong endorsement of the platform in the region, following the joining of LGT, Maybank, KGI Securities and Union Bancaire Privée as the first four Asia-Pacific distributors in March, said Anup Gupta, head of Deritrade MIP in Apac.

JULY 20, 2015



Kate Toumazi

Thomson Reuters bolsters credit risk monitoring tools

Thomson Reuters has beefed up its credit risk capabilities by adding StarMine Credit Default models to its DataScope suite in a move that brings together on one platform reference data, core ratings agency data, pricing and analytics. The models provide data services that enable automated and continuous monitoring and review processes to improve a company's ability to predict credit events as early as possible. Regulations such as the Basel accords and Dodd-Frank outline how companies should assess their credit risk exposure, underscoring the need for greater focus on risk management to meet compliance requirements. The coverage for the models does not specifically include structured products, however clients can use these ratings in combination with the US company's entity/issuer data to gain an insight into the default probability of the issuer, said Kate Toumazi (pictured), global head of risk data services at Thomson Reuters.

JULY 13, 2015

Thomson Reuters rolls out valuation 'Navigator'

Thomson Reuters has launched Thomson Reuters Valuation Navigator, a software solution for automation of reference data and pricing workflows designed to enable back-, middle- and front-office teams to analyze and search across complex data sources, compare multiple pricing options and optimise valuation and risk activities. The Navigator tool aims to improve transparency by streamlining data collection while eliminating "tedious spreadsheet-based processes" to simplify net asset value and profit and loss calculations. Through data consolidation and reformatting, users can integrate feeds directly into existing internal systems and gain insight through access to market-observable inputs and source data that supports evaluated pricing. The new tool is a reflection of Thomson Reuters' increased focus in the structured products market following the acquisition of pricing partners in 2013, according to Jayme Fagas, global head, valuations and transparency for Thomson Reuters Pricing and Reference Services.

JULY 29, 2015

BARCLAYS WEALTH

Barclays Wealth to scale via AG Delta's DealStation for structured products

Barclays Wealth has reached an agreement with AG Delta to go live in Hong Kong and Singapore with DealStation, the Singapore-based provider of digital and electronic trading solutions multi-issuer platform for equity-linked structured products. The agreement is focused on improving efficiencies by eliminating manual email pricing processes, with an electronic platform to support requests for quote/execution to an extensive panel of trading counterparties and a wide universe of product payoffs.

Unique elements of this initiative include streamlining workflows between relationship managers and dealers, and between dealers and issuers, including normalising communication standards across issuers not just for quotes / requests for execution, but also processes, documentation and events during the pre- and posttrade lifecycle. The Deal Station module that went live is part of AG Delta's digital wealth investment, workflow and compliance platform, which is in production with thousands of bankers, across all asset classes, retail, wealth and private banking in over 15 markets.

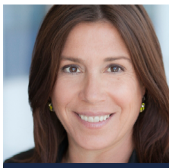
SEPTEMBER 29, 2015

TG RFQ-hub targets buy-side in US push, eyes LatAm

ITG RFQ-hub has expanded its network of liquidity providers and entered the North American market. The expansion into the US market is part of the company's plans to leverage its capabilities and expertise of European markets. Over the past few months, ITG RFQ-hub has added eight undisclosed sell side liquidity providers in the US and 10 new sellside liquidity providers in the Europe, Middle East & Africa (Emea) region, said Llamas. On the buy side, the company has added seven clients in Emea and has five clients joining in the US. It has also been granted membership of the Swiss Structured Products Association. ITG RFQ-hub is available on a standalone basis or as part of the firm's Triton execution management system. ITG has also completed the integration of ITG RFQ-hub with the ITG Position Manager order management system, enabling global macro and multi-strategy hedge funds to trade and book a wide range of listed and negotiated derivatives, exchange-traded funds and structured products with multiple liquidity counterparties.

OCTOBER 15, 2015

Fubon opts for Thomson Reuters structured products pricing and risk management technology


Jayme Fagas

Fubon Financial Holdings has selected Thomson Reuters to provide the technology for pricing structured products and managing risk in exotic portfolios. The choice of Thomson Reuters was attributed to its understanding of the regulatory needs as well as the offer of direct access to core calculations including cashflow descriptions, market data inputs, numerical methods and model assumptions, said Jayme Fagas, global head of valuations and transparency for Thomson Reuters Pricing and Reference Services. According to Fagas, Fubon's selection is a result of Thomson Reuters' increased presence in the Asia Pacific region. "The Pricing Partners acquisition allowed us to increase our presence in the European pricing and valuation segment especially in the structured notes and complex derivatives markets," said Fagas. "Thomson Reuters also benefitted from this acquisition in the Asia Pacific region as Pricing Partners was already established there […] with a comprehensive financial library that supports pricing and valuation of structured notes and other complex derivatives instruments."

DECEMBER 7 2015

Vontobel adds smart crowd data to Deritrade platform

Vontobel Financial Products has launched a customisable, decision-making tool to buy structured products by using smart and crowd data, aimed at relationship managers and asset managers in Europe and Asia Pacific. Vontobel's Deritrade SmartGuide makes user activity and market data accessible to the bank's multi-issuer platform users with "unparalleled insights" and a "new level of transparency" in the structured products market, according to Gerhard Meier, head of Deritrade multi-issuer platform. The new tool provides users with a new functionality that will enable them to compare products against a wider context of alternative options.

OCTOBER 6, 2015

Thomson Reuters adds advance view of instruments and securities

Thomson Reuters has launched DataScope Equities Plus, an enhanced, customisable bulk data feed offering continuously updated reference data and end-of-day pricing on instruments and securities. The company's DataScope Solutions, which covers more than 650 structured notes and derivatives, already provides pricing, referential and security master data attributes that support pre-trade, trade and post-trade operational workflow requirements across the front, middle and back offices of financial institutions. DataScope Equities Plus will provide an advance view of instruments and securities before the start of each trading day. DataScope Equities Plus is a reflection of and a response to the need for more timely and accurate information around clients' books, said Stuart Martin, global head of asset servicing at Thomson Reuters. "It can be seen as a hybrid between DataScope Select – which is our flagship cross-asset product as well as portfolio-driven – and DataScope Equities, which delivers end-of-day pricing and reference data sets," said Martin.

NOVEMBER 2, 2015

Vontobel trebles issuance on multi-issuer platform in third quarter

Vontobel's Financial Products reported a turnover of over CHF500m (€459m) on its Deritrade multi-issuer platform in the third quarter of 2015, which represents a threefold increase in issuance compared with the same period last year. The Swiss bank reported a strong performance in its home market and Germany, as well as positive progress of its pan-European expansion in the area of leverage products with its market debut inFinland in September which follows its market entry in Sweden at the start of 2015. In the second half of 2015, two more banks (JP Morgan in Switzerland and Crédit Industriel et Commercial/CIC in Asia-Pacific) joined the respective versions of its multi-issuer platform. In Asia, the technical implementation of the platform is advancing as planned, with eight distributors and four issuers in the process of being connected to the platform, including LGT, Maybank, KGI Securities and Union Bancaire Privée, said the bank in a statement.

DECEMBER 16, 2016

Barclays offloads risk analytics and index business to Bloomberg for US$790m

Bloomberg has entered into an agreement to buy Barclays Risk Analytics and Index Solutions for approximately US$790m, with completion expected by mid-2016. The bank's division in charge of benchmark and strategy indices, portfolio analytics, risk and attribution models, and portfolio construction tools span global markets covering multiple asset classes, most notably the Barclays Family of Aggregate Bond Indices. Bloomberg has also increased its investment in Port, its multi-asset portfolio risk and analytics tool, and is seeking to expand in this area with the acquisition of the intellectual property in Point, Barclays' equivalent, which will operate Point for 18 months post completion in order to help clients transition to Port.

SEPTEMBER 29, 2015

JANUARY 7, 2016

Bloomberg boosts new DLIB with Lexifi technology

Lexifi and Bloomberg have expanded their technology integration via Lexifi's Instrument Box which is used to support the new Bloomberg Derivatives Library (DLIB) on the company's financial data and information platform. DLIB provides tools for the derivatives workflow, from idea generation and market-data analysis to structuring and pricing of new products, using standard templates or advanced scripting capabilities which are supported by LexiFi's financial contract description language, MLFI (Modeling Language for Finance). By using Blan, the company's simplified scripting language built around MLFI, users of DLIB can formally describe any financial instrument and automate the entire product life cycle. DLIB and Bloomberg's pricing models have been 'tightly integrated' with Lexifi's pricing infrastructure and proprietary real-time code generation technology. This, combined with the flexibility of MLFI, will enable Bloomberg to reduce the time-to-market for covering new product structures in DLIB. The technology company deployed LexiFi's Instrument Box into its financial data and information platform service in March 2014.

JANUARY 29, 2016

Land's end for Asian multi-dealer structured products platform

The launch of the integrated multi-issuer investment products distribution system, known as the Land initiative has collapsed, according to sources. The platform was announced in a letter of intent signed by Leonteq, DBS, Avaloq and Numerix in March 2015. The Swiss structured products provider also announced that cooperation on the partnership with DBS, Avaloq and Numerix to develop the Land initiative ceased "due to diverging interests on some business model and exclusivity discussions". Leonteq stated, however, that it will continue to implement buyside automation initiatives on its own and with partners such as Avaloq. A senior executive from a wealth management company added that the project was flawed from the start as, "there are too many vested interests with that kind of initiative" and distributors want "absolute neutrality". "What can the Land initiative bring to the table that other platforms, such as FinIQ and Contineo, haven't already?" said the wealth manager.

2016

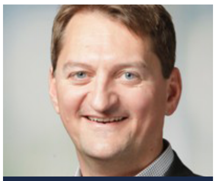
FEBRUARY 17, 2016

Contineo plugs-in Natixis as an issuer, adds four to buyside

Contineo, the Hong Kong-based multi-issuer platform for structured products has added JP Morgan Private Bank and BSI as buyside subscribers to its messaging network, and Natixis as a new issuer. Contineo is also in talks with two other private banks, HSBC and BNP Paribas, which are considering trialling the network's buyside facilities, according to sources. Current network participants include Julius Baer, Barclays, BNP Paribas, Goldman Sachs, JP Morgan and Société Générale. Contineo adds transparency to the structured products market, and Natixis is a strong supporter of more transparency, according to Nicolas Reille, head of sales, equity derivatives, Asia Pacific at Natixis. "In particular, a more transparent market will help to further diversify the range of structured products commonly traded by investors, improving the returns of their structured products portfolios in different market conditions, leading to a growing share of structured products in investors' portfolios."

03 MARCH, 2016

Volatility drives shift to low barrier reverse convertibles, Six readies OTC platform



Andre Buck

Turnover on the Six Swiss Exchange and Six Structured Products Exchange in February advanced 8.3% to CHF122.1bn (€112.5bn) across 5,100,692 transactions, a month-on-month increase of 10%, according to figures released by the Swiss exchange. The Swiss exchange is also gearing up to go live with its bilateral over-the-counter (OTC) trading platform for non-listed derivatives XBTR launched in August 2013. The first issuer to join XBTR was Leonteq Securities in April 2015 with other undisclosed participants and issuers getting connected shortly after, according to Andre Buck, head of sales at Six Swiss Exchange. "Several participants are in the process of on-boarding, testing the connection with XBTR and will soon join the live market to start with bilateral trading," said Buck. "We are currently fine tuning the tools and functionalities to address the needs of issuers, but we remain confident that we will go live with the first trades very soon."

Making the connection

The wave of single- then multi-dealer platforms for the pricing and trading of structured products that have proliferated since the financial crisis were created to serve a number of purposes. As well as allowing for the kind of efficiencies that equal instant cost savings to issuers, the single-dealer version has retained the tailormade characteristics that make these products so distinct and so desirable. But the advent of multi-dealer platforms, as well as the limited opening of single-dealer platforms to additional issuers has accentuated the savings on offer. Pablo Conde reports

The structured products market has gone a long way since its starting point, when issuers launched a product and sold it via multiple distributors. At the time, the minimum size of a transaction was generally very high and, as a result, the sales process was lengthy as orders were gathered from different investors.

It all started to change after the financial crisis, when issuers began investing in technology to accommodate more specific needs and a concomitant desire for smaller issue sizes. The move started with UBS Equity investor and the development of Comet by Barclays, new platforms developed using internal systems that did not necessarily address some of the challenges around automation, such as the issuance of the notes, clearing systems and the life cycle of products.

Around 10 years ago, any bank could enter the structured products market and transact business because clients were looking for just two things: the best pricing and payoff innovation, according Alain Alev, Head of Structured Equity Derivatives Sales, Europe, Middle East and Africa at HSBC. "Nowadays, clients want to be connected to a platform where they can access pricing and structuring tools, and they want to be able to trade any kind of underlying asset (equities, baskets, exchange-traded funds, algorithms, quantitative indices) and choose from a large pool of payoffs," said Alev. "The minimum requirement is electronic pricing, but others are now requesting full click-and-trade capabilities, as well as fully automated post-trade services."

Almost exclusively, digitalisation around structured products was pushed internally by banks, as opposed to issuers deploying third party solutions, simply because there were no techniques on offer from software vendors that could effectively do this for issuers, according to David Wood, Managing Director, Cross-Asset Sales and Head of Electronic at Société Générale.

"There are instances where issuers use a packaged product to help them in their way, but these were deployed on a stand-alone basis," said Wood. "First, we saw developments in documentation (prospectuses and final terms), with the market deploying IT tools from third party providers to automate the process, but these tools had then to be extensively developed internally. It was never a case of buying a package and plugging it in, and the internal IT team had to work for some time (one year) to make it work, as the tools had to be highly customised to match internal systems."

Single issuer platforms were developed initially by investment banks to provide full control over every bespoke trade for individual client portfolios, including pricing, trading and executing across a range of global underlyings, such as equity indices, stocks, exchange-traded funds and precious metals, such as gold, silver, palladium and platinum. The aim was to provide tools, not just for the shape of the structure, but also with respect to timings, barriers or buffers and size.

After that initial stage, new requirements around valuation and pricing, booking, risk and life cycle management gained momentum and new tools were deployed to meet the requirements of the value chain.

According to Wood, in today's market, investors want to access pricing, but also to engage in a dialogue with issuers and work with them rather than having to have many different conversations. "An integrated offering is what will add an edge in this market," said Wood. "This will give end investors the freedom to build their own products, pressing the buttons themselves and trading or moving onto a voice transaction because they need to discuss a feature that is not available on the platform or the ticket size is higher than average. The improvement comes from the fact that, for a good number of our products, clients now have a starting point to experiment with where the market is and what the options are."

From an issuer perspective, the market evolved after investment banks started to scale out their single issuer platforms, but there is no single technology or tool that has been used by the industry due to the complex process around different docking and risk management systems developed by each bank.

From single issuer to multi dealer

As the initial model based on investment banks servicing their own private banking channels opened opportunities for a more efficient approach, individual issuers opened up their platforms to wealth managers, in a move to use their own technology to bring efficiency and move towards open architecture. The problem for some banks was that they did not have the capabilities to provide this service and, for the market in general, the challenge was around the lack of market standards. "No one had sat down and looked at standardising the processes around simple structures," said Wood. "That's a challenge for the Fintech industry, because it's good to have the technology solutions, but without standards it can be extremely expensive."

Those banks who had the means to get a competitive edge moved in fast. Swiss bank Vontobel was the first to expand its structured products issuing platform, Deritrade, when it signed Morgan Stanley and Societe Generale in 2012, on the basis that it would not distinguish between Vontobel and third-party products. The platform was rolled out in Singapore in 2014, and has already signed on a number of distributors, including Crédit Industriel et Commercial, LGT, Maybank, KGI Securities and Union Bancaire Privée.

In 2015, Deritrade added JP Morgan to a pool of issuers that now includes Deutsche Bank, Morgan Stanley, SG, UBS, Vontobel and ZKB, which account for more than 70% of the exchange-traded volume of structured products in Switzerland, and is used by 31 banks and more than 300 asset managers in the country who purchased almost CHF1bn of structured products in the first half of 2015. Vontobel Financial Products reported a turnover of over CHF500m (€459m) on its multi-issuer platform in the third quarter of 2015, a threefold increase compared with the same period in the previous year. The Swiss banks' heavy investment last year included the acquisition of derivative.com, a local, independent multi-issuer platform, effectively removing the competition.

According to Gerhard Meier, Head of Deritrade, the platform handles more volume than the Six Swiss Exchange in custom-built, yield enhancement products, and the bank remains committed to expanding its capabilities with new tools and functionalities in Europe and Asia Pacific, such as the launch of a customisable decision making tool to buy structured products by using smart and crowd data, aimed at relationship and asset managers.

> "Simplifying the connectivity between banks and investors is a major step to bringing structured products to the mainstream.
>
> Mark Muñoz, Contineo

"The beginning in the platform segment is difficult, as you need to build a consistent supply and demand, but, once you reach a certain level of activity, the platform increases its attractiveness and is self-propelling," said Meier. "Deritrade offers full automation on execution, document generation, post-trade services and repayment. Issuers have a new opportunity to bring their prices and services directly to the point of sales, ie. the relationship manager – a better service at a radically reduced cost. When price discovery is transparent in the market, as well as the revenue side (private banks have to disclose distribution fee to clients), what is left to build a competitive advantage is reduce operational costs and increase advising quality."

The challenges around automation and making the technology work front to back prompted a consolidation which saw a number of issuers having to rethink their plans and involvement because, "having a highly automated pricing capability and not having the ability to fulfil that in an efficient way creates all sorts of challenges to your business," said Wood.

The Asia-Pacific market provides a good example of how the market has evolved and the challenges, with the emphasis on price discovery. "We now have a very well valued market without the necessary standards to fulfil the needs of the market,"said Wood. "Increasing the connectivity between issuers and private banks is what multi-issuer platforms are doing. They are trying to solve a problem, rather than each bank or issuer doing it independently with no added commercial value. This is also an example of how banks are pushing this, rather than tech providers."

Simplifying the connectivity between banks and investors is a major step to bringing structured products to the mainstream, according to Mark Muñoz, Chief Executive at Contineo, a multi-issuer structured products platform and messaging network launched by a consortium of banks including Barclays, BNP Paribas, Goldman Sachs, HSBC, JP Morgan and SG, and powered by Fintech company AG Delta. "This will not only create efficiencies for issuers and providers, but, ultimately, it will bring further transparency to the market,

as well as speed and accessibility and, therefore, lower prices to the end investor,"said Muñoz.

According to Muñoz, private banks in Asia-Pacific understood structured products differently, quoted/priced structured products differently and there was a need to bridge that gap by "bringing the banks together and creating a simplified and unified understanding of the products for the clients".

Furthering automation

Another example of the crossover around automation is Leonteq (formerly EFG Financial Products), a Switzerland-based investment bank, which is pitching itself as a technology, engineering and infrastructure partner for investments, after changing its strategy in 2013 to concentrate on white-labelling as an outsourced service partner. As it reduces its own issuance of products, the Swiss company joined efforts with Avaloq to provide financial institutions using the banking software solutions provider's banking suite to further automation in the offering and handling of structured products. The interface between the Avaloq banking suite and the Leonteq platform made it possible to book the bank's investment products (including those of its white-labelling partners) for investors using its Constructor single issuer platform directly with Avaloq's technology at the respective custodian bank. Constructor is a web-based application that enables intermediaries and professional investors to create and calculate structured investment products on over 1,000 underlyings and in a wide variety of currencies. The platform is only offered in Switzerland, however, there are plans for a rollout in other countries.

In March 2015, Leonteq, DBS, Avaloq and Numerix agreed to launch an integrated multi-issuer investment products distribution system with the aim of enhancing the offering and distribution of structured products with the Asia-Pacific region as its initial domain. The main differentiating factor of the platform was the digitalisation of the full value chain to private banks, including pre-trade analytics, multi-issuer price requests, standardised documentation, trade processing, direct booking and product set-up within the core banking system, as well as lifecycle management and post-trade analytics. However, less than 12 months into the deal, the partnership (known as the Land initiative) collapsed, with the Swiss company stating in its 2015 results that the cooperation had ceased "due to diverging interests on some business model and exclusivity discussions".

Leonteq also stated that it will continue to implement buyside automation initiatives on its own and with partners such as Avaloq. The Swiss bank is in talks to be included on Contineo's multi-issuer platform, according to sources.

Issues around the best model for multi-dealer platforms are not exclusive to Land. Beyond the private bank subsidiaries of its consortium, Contineo had only plugged-in one private bank (Julius Baer) before February 2016, when ir added JP Morgan Private Bank and BSI as buyside subscribers and Natixis as a new issuer, although the private banks of HSBC and BNP Paribas are in talks to connect to the platform, according to sources. Vontobel, on the other hand, added eight distributors and four issuers to its Asia-Pacific platform in 2015, including LGT, Maybank, KGI Securities and Union Bancaire Privée.

FinIQ has three banks connected to its cross-asset module for the distribution and transaction processing of treasury and wealth management products, including Credit Suisse, Deutsche Wealth Management and an Asian bank. The specialist software solution provider launched FinIQ EQ Connect, a multi-asset, multi-dealer connectivity platform for equity- and foreign exchange-linked structured products in December 2014. The platform is dealer-neutral and offers connectivity to marketmakers in equity-linked products, such as equity-linked notes, range accruals, fixed-coupon notes, accumulators and decumulators, while enabling optional integration with other core banking systems. The platform is powered by Thomson Reuters DataScope Select, which provides cross-asset, intra- and end of-day pricing, reference data and evaluated pricing services. FinIQ's FXD Connect does the same for FX options, dual currency investments, barriers and multi-leg strategies.

The aim of the platform is to provide connectivity with top-tier market-makers for equity- and FX-linked products, for securities as well as complex OTC derivatives, according to Milind Kulkarni, chief executive officer and managing director of FinIQ. "The platform has been deployed all the way to the relationship manager, because it complements price discovery, with complete order management and transaction life cycle management," Said Kulkarni. "A client can join the hosted platform, saving significantly on infrastructure costs and enjoying faster time to market; or choose to opt for the traditional software licensing model on its own hardware."

Exchanging places

Developments in Asia have also been mirrored in Europe by stock exchanges (and also issuers) seeking to tap into OTC bilateral trading and raise their profile in structured products.

In April 2014, Börse Stuttgart acquired Citi's automated trading system (Cats) for bilateral trades, which includes OTC transactions in structured products, in a move to create a pan-European market for structured products and a central hub for issuers. "Cats is not just a bilateral OTC trading system, it is a routing service for brokers and market-makers to stock exchanges," said Rothenhäuser.

"Since we can't export Börse Stuttgart's hybrid Euwax market model to other countries, with Cats, we can reach investors whose order-flow providers do not give them access to stock exchange trading. We believe multi-issuer platforms are extremely complementary for our business. However, there is still no consensus on whether one multi-issuer platform can serve the whole of the market, or if there is a need for one in every region. Buyside brokers usually dislike multiple connectivity to various IT systems."

Six Swiss Exchange also soft-launched XBTR, its bilateral OTC trading platform for non-listed derivatives in August 2013. The platform allows participants of Six Structured Products Exchange to trade OTC products (securitised derivatives) and enables settlement on a central platform via the existing interfaces. The platform provides bilateral trading on a request for quote-based (RFQ) trading system, is not regulated by Finma, Switzerland's financial markets watchdog, and offers instant trading (products can be traded on the basis of their Isin before the rest of the reference data is available. Trades on XBTR are automatically forwarded to Six Securities Services for settlement and are not published.

Leonteq was the first issuer to join the platform, in April 2015, with other participants and issuers expected to connect soon, according to Andre Buck, head of sales at Six Swiss Exchange. Potential participants are in the process of on-boarding, testing the connection with XBTR and "will soon join the live market to start with bilateral trading", according to Buck.

Adding to singles

In October 2014, UBS opened its structured products platform to other investment banks, launching a pilot project offering investment banks access to EQ/FX Investor, a new issuance platform connected to 150 client advisers in Switzerland, to which it added Vontobel and Barclays to provide pricing to financial advisers requesting quotes on structured investments.

UBS has also unveiled plans to launch an e-platform for financial products in Asia-Pacific, targeted at private banking and institutional investors as a way to "deliver better investment solutions to clients and maximise its technology capabilities", according to Bryan Crawford, head of the institutional solutions group at UBS, speaking at the launch of the regional initiative.

In March 2015, Société Générale added a new OTC functionality to its Alpha platform to allow distributors, private banks and wealth managers to price OTC instruments alongside the platform's structured products. The new OTC capabilities were aimed at investors who trade their own paper or issue their own structured deposits, "enabling clients to service the whole life cycle of the bank's offering both from a front- and back-office perspective", said Wood.

"Alpha has a web-user interface, and also APIs (application programming interfaces), and can link directly with clients and also with multi-issuer platforms," said Wood. "Servicing the full product cycle also includes serving the secondary market once a product has been launched. This includes large portfolios combining different asset classes and maturities. The platform also has an optimised price discovery function, allowing users to execute unlimited price requests and fine-tune each product parameter, as well as post-trade services, including dedicated lifecycle management, export functionalities for term sheets and a legal documentation generator."

> **Alpha has a web-user interface, and also APIs (application programming interfaces), and can link directly with clients and also with multi-issuer platforms. Servicing the full product cycle also includes serving the secondary market once a product has been launched.**
>
> David Wood, Societe Generale

Alpha also offers electronic execution for structured products with customisable payoffs across a range of equity underlyings. Available structures include one or several worst-of underlyings, guaranteed or conditional coupons, and the choice of trading using Euro, Swiss franc-, UK sterling- and US dollar-denominated reverse convertible and knock out or autocall structures. The latest addition was a credit-linked facility aimed at UK-based professional investors which was launched in mid-January 2015. The French bank in the middle of rebranding its Alpha platform as SG Markets.

Besides the challenges to cover all instruments from plain vanilla to complex structures, multi-issuer platforms will have to be managed by an independent party to be successful, according to Johan Groothaert, consultant and former global head of investment products and platforms at UBS. "The best model will be an open-architecture multi-issuer platform that allows investment banks to plug in," he said. "It is difficult for investment banks to plug into a platform run by another investment bank, as they are all in competition, and, hence, the platform would be best operated by a neutral service provider or a syndicate of banks."

For Groothaert, the single-issuer model represents an intermediary step, because, from an investor perspective, it is better to have multiple providers on a platform. "The current model is often based on investment banks servicing their own private banking channels on an exclusive basis. This is an important first step in the automation process but cannot be the end of the road because private clients want to have choice and best execution," said Groothaert.

Asia's private banks are weighing up the pros and cons of moving their structured product businesses to multi-issuer platforms as they look to implement cost efficiencies and reduce operational costs, **writes Farah Khalique**.

Private banks mull structured products supermarkets

The attraction of multi-issuer platforms for private banks and wealth managers is manifold. Relationship managers can save time by automating their orders through to trade execution and settlement, compare instant prices from a variety of providers and compile a proper audit trail. Private banks, like all banks, are under pressure to cut their cost base; banking is not the cash cow it once was, pre-crisis.

"The structured products market in Asia is maturing and has standardised on some pay-offs; it makes total sense for it to become more efficient at handling these products, more transparent and for participants to have better access to markets," said Akshay Prasad, head of structured products, solutions and trading group for Asia at Deutsche Bank Wealth Management.

Private banks want sophisticated functionalities of increasing complexity, said Dominic Cho, head of the e-commerce and e-trading team at consultancy firm, Greyspark, in Hong Kong. "Not all products are exchange traded, nor can they be settled on exchange, such as over-the-counter derivatives", said Cho. "There is a need for private banks to access post-trade services via the platform at the point of execution. As structured products can be highly complex, the post-trade workflows are crucial."

Deutsche Bank Wealth Management worked with technology vendor FinIQ - joining its multi-dealer platform, Connect, in 2014 - and has rolled it out to around 200 relationship managers. "The experience has been positive," said Prasad.

Previously, Deutsche's structured products business was fragmented - trades were done by phone, email and Bloomberg messaging. The move has been cost effective. "Significant benefits include numerical time-saving, but also diversion of resources into more value-added products", said Prasod. "We can use our intellectual capital to analyse markets instead of more commoditised work."

Multi-issuer platforms introduce operational efficiency as well as a better view of the market on the relevant products, said Prasad, which translates to a better client experience as well as better and quicker information flow. "The consequent time saved is reinvested into providing a better experience to clients in terms of advice and bespoke product iteration," he said.

But the question remains whether these platforms, designed to service private banks and wealth managers, can attract enough buyers and sellers to make them the gold standard in trading structured products.

Private bank Julius Baer is also pursuing multi-issuer connectivity instead of a single dealer platform, according to Roger Meier, head of structured products for Asia at the private bank, although it is still in the midst of evaluating the best possible setup.

Multi-issuer platforms have caught on in other areas of finance, such as foreign exchange, with resounding success, and has simultaneously reduced the cost of trading and boosted price transparency, although the use has been mainly limited to relatively simple, cash trading. The question is, can the same success be replicated in the relatively opaque world of structured products?

Structured products supermarkets

Private banks in Asia have not rushed en masse to join the available multi-issuer platforms - at best they could be described as a 'slow burner' - despite an underlying sound concept.

The three key multi-issuer platforms in Asia Pacific are: Contineo; FinIQ EQ Connect; and Deritrade, from Swiss private bank Vontobel. All three platforms are distinct in their offering, but are chasing the same audience of private banks and wealth managers in the region. A fourth proposed platform, called the 'integrated multi-issuer investment products distribution system' - otherwise known as the Land initiative - appears to have fallen by the wayside, despite much fanfare at the time a press release announced the launch a year ago.

Contineo went live with its messaging system for equity-lined structured notes in June 2015; it has since signed up seven investment banks and six private banks. But all seven investment banks helped found Contineo and, therefore, have a vested interest in its success - Goldman Sachs, JP Morgan, HSBC, Barclays, SG and BNP Paribas. These are all major players in the world of structured products, but Contineo has yet to attract an issuer bank that is not financially backing the platform.

However, the technology vendor has signed up six private banks: JP Morgan Private Bank, HSBC Private Bank, Barclays Wealth Management, BNP Paribas Wealth Management, BSI and Julius Baer.

> Neutrality is key with MIPs, buy side led initiatives have a greater chance of success in the long run... The buyside wants competition in the market to ensure prices are fair.

Rival technology vendor FinIQ launched its own multi-dealer platform, Connect, in December 2014, offering equities, fixed income, foreign exchange, funds and hybrids.

There are seven issuer banks and "a few" private banks live on the platform, according to Mahesh Bulchandani, chief executive officer at FinIQ Asia. Deutsche Bank Wealth Management and Bank of Singapore are two private banks that are known to be using Connect, but the platform has failed to attract more than a handful of buyside names. Bulchandani insists that there are a few more that are "signed up", and a few more in the pipeline.

Vontobel appears to have had marginally more success in attracting buyside names to Deritrade, including LGT, Maybank, KGI Securities and Union Bancaire Privée.

Corporate fall-outs, buyside suspicion and the classic 'chicken and egg' dilemma are just a few of the factors stymieing the progress of these platforms. In 2015, a brand new "innovative platform for structured products" was announced by its creators - Leonteq, Avaloq, Numerix and DBS (Land). They signed a letter of intent with a primary focus on the Asia-Pacific region, but less than a year later the agreement is said to have crumbled.

The platform never even got off the ground, with a source close to the project citing the sheer size of the project as an issue. "[It is] such a massive project, it takes time and we haven't put down on paper what the timelines are going to be. Internally, we have a timeline, but we're not making that public."A senior executive at an investment bank dismissed the initiative as pure spin. "There are press releases and then there is reality. Some people have actual software which works, others have a venture which they have published," said the banker.

Avaloq and Numerix are reported to have pulled out of the deal altogether, while DBS are Leonteq are also believed to be going their separate ways. Industry experts poured scorn on the initiative - a senior executive at a wealth management firm criticised the proposal for having "too many vested interests" and declared that the buy side wants "absolute neutrality". "There are so few details about it and most private banks' business models won't fit in it."

Avaloq and Numerix are software companies, DBS is a private bank and Leonteq is a financial services provider that makes markets in structured products. Some private bankers are naturally suspicious of platforms run by marketmakers that sell their own structured products, while simultaneously claiming to offer users a wide array of products from other providers.

"Neutrality is key with MIPs, buy side led initiatives have a greater chance of success in the long run," said Prasad. "The buyside wants competition in the market to ensure prices are fair. The quest is for true efficiency as opposed to platforms that are built by parties with vested interests in marketmaking, because there can be potential conflicts of interest."

If it ain't broke...

Multi-issuer platforms are intended to replace the incumbent system - pseudo-MIPs facilitated by email - which developed in sync with the standardisation of popular structured products like equity-linked notes. Private bankers can request prices from, say, 10 issuer banks via email, and quickly receive multiple quotes. It may be rudimentary, but it works. This deeply entrenched email pricing system cannot be replaced overnight, according to Mark Munoz, managing director at Contineo.

"Private banks still using email and Excel spreadsheets for parts of their processes and are still transitioning to MIPs," said Munoz. "There is a burn-in period, during which you only see a certain amount of flow."

Private banks that generate significant volumes of trades may be well suited to these new platforms, but those with a niche business model are less inclined to ditch the email pricing system that has served them so well. The hassle of joining one of these platforms can also be off-putting.

Private banks that choose, for example, FinIQ can either opt for an installed or a hosted solution. The hosted version takes up less than 10% of bank's internal human resources, but does not include customer data of the private bank. That means FinIQ cannot offer all the extra features, such as checking a client's compliance, credit and cash availability before the trade. "Thus, in a hosted solution, we can only offer pricing execution, and partial post-trade solution, not the end-to-end solution," said Bulchandani.

An installed solution is the full package, but this is a major venture for a private bank which involves appointing internal staff to manage the project, procuring the right hardware and assembling support staff. Furthermore, every bank has a list of projects that are all competing for a finite amount of resources. Senior management may like the idea of a multi-issuer platform, but ultimately decide money is better spent on more pressing projects, like implementing the rules required to meet regulators' deadlines.

Nevertheless, there are benefits to transitioning from email and excel spreadsheets to an online system. Everything is captured on a single platform, instead of scattered over dozens of emails, and management can get a bird's eye view of the bank's structured products.

Chicken and egg dilemma

But moving multiple banks onto a single, centralised platform is easier said than done. Societe Generale worked for years with the collection of banks behind Contineo; formulating an industry standard took time, energy, money and "a good deal of collaboration", said David Wood, the bank's head of electronic.

"One of the key challenges to launching MIPs in Asia Pacific is standardisation," said Wood. "How do you get the market to agree norms when everyone is doing everything slightly differently with different internal processes? This is one of the challenges we face. There is a lot of standardisation in Asia, but innovation is slower than in other regions."

Fragmentation is a real problem. Issuer banks have developed their own single dealer systems and so, because of legacy systems and traditional email pricing, it is a big transition for private banks to move to a more automated system. To that end, Contineo has developed one set of protocols for all banks to use.

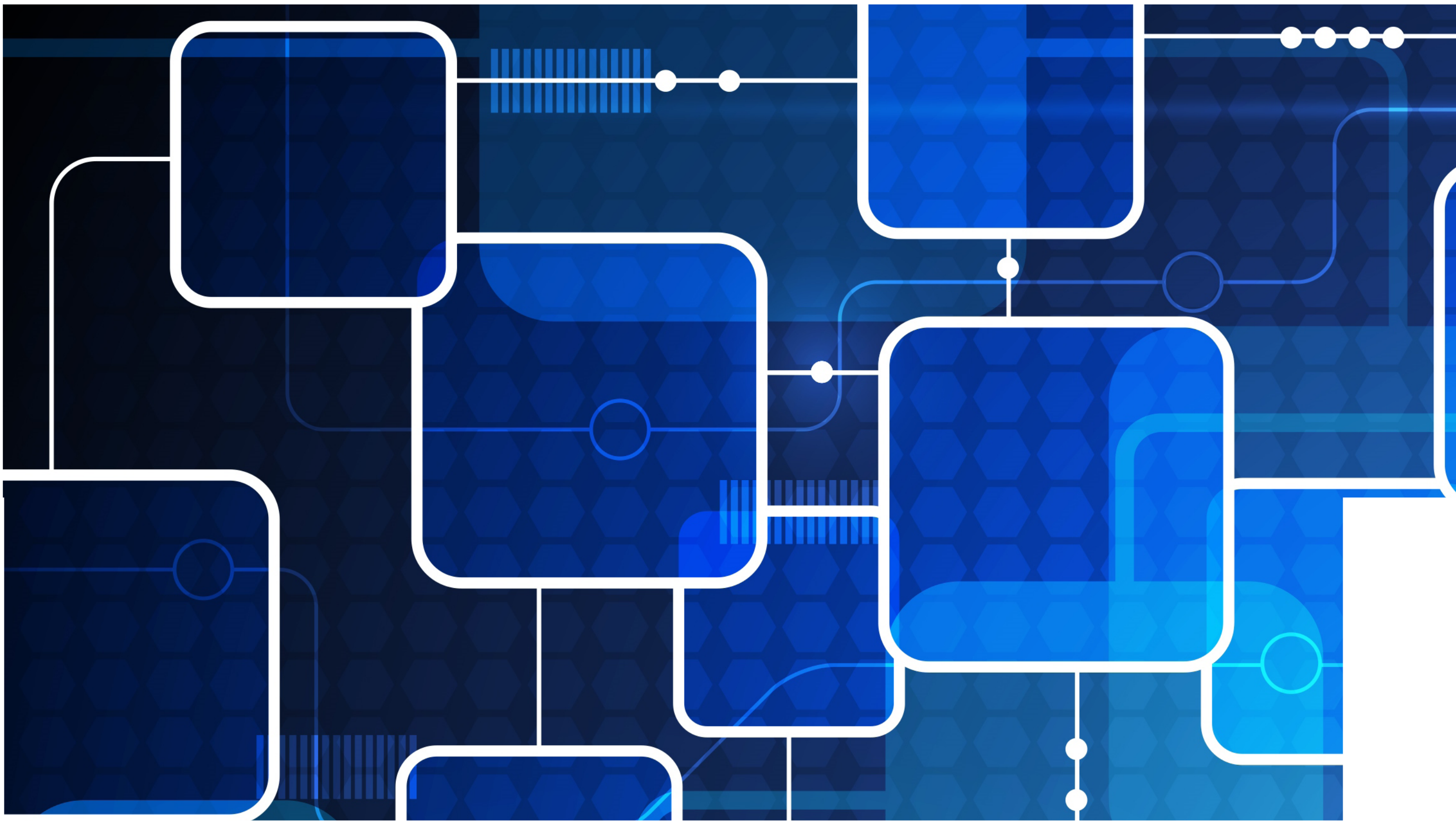
But the real key to long-term viability is ensuring there are always enough buyers and sellers to create a vibrant, symbiotic marketplace. This liquidity is paramount, said Frederic Dussuax, head of equity derivatives e-business and digital offering at BNP Paribas.

"An MIP has to create a virtuous circle where private banks are joining because there are enough issuers on-board, and where other issuers are joining because new private banks are being on-boarded," said Dussuax.

These platforms have yet to achieve critical mass, said Greyspark's Cho. Cho estimates critical mass would constitute a minimum of 10 large private banks and 20 issuer banks, but no platform so far has come close to achieving those figures.

The trick to attracting private banks to multi-issuer platforms is to offer them something they cannot refuse. An end-to-end solution that offers pre- and post-trade services as well as competitive prices is the answer, according to market participants. FinIQ's Connect platform offers such a package and Contineo will soon offer private banks post-trade services, which is high on their wish list. Vontobel's Deritrade is also a 'front-to-back' offering.

But the most important factor in the multi-issuer platform revolution is out of anyone's hands - time. The number of structured products traded in Asia has increased significantly since the doldrums of the last decade, due to the rise of high net worth investors. The growth of this market over time could be the catalyst for private banks to become more efficient and offer a better service to their wealthy clients. Time will tell if multi-issuer platforms become the new modus operandi in the world of structured products.



Automate that:

Technology & software providers

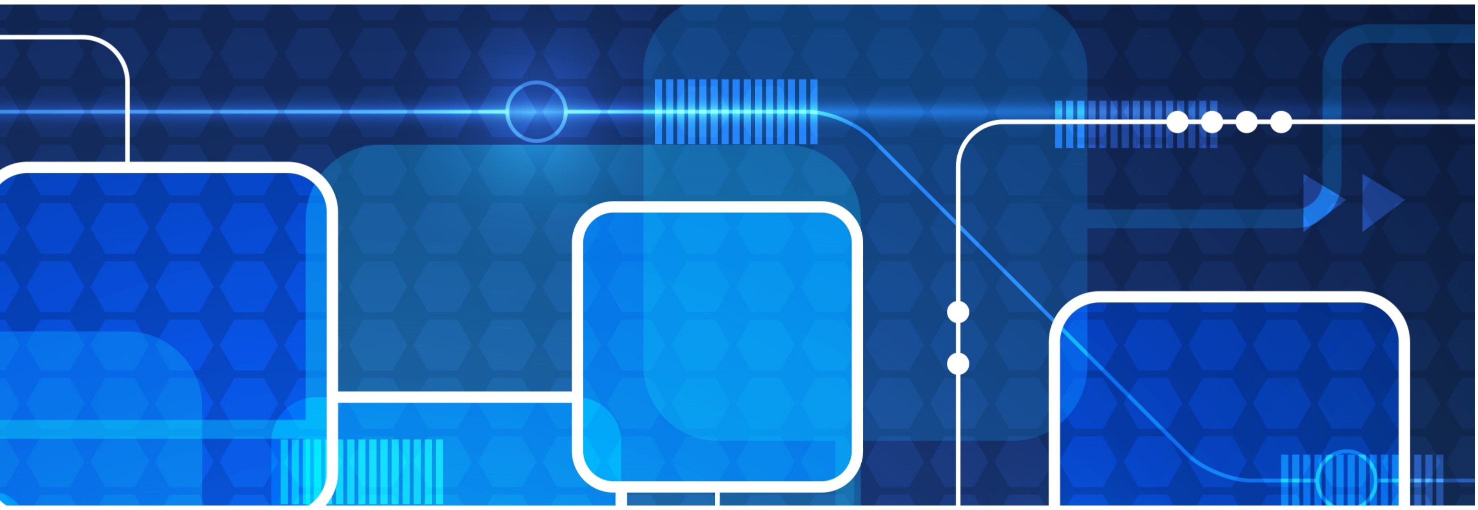
As banks contemplate the possibility of hiring more technology specialists than bankers, independent technology companies have jumped at the opportunity to help out and provide the kind of software that makes the integration of new regulatory requirements possible. Pablo Conde reports

As banks look into the future and dream of seamless straight-through processing, they have sharpened up their offerings of all you need to deal with the various and varied valuation and trading technology.

The latest foray into furthering the technology invasion into structured products comes in the form of multi-dealer platforms, on which banks can introduce their products onto a system in which they are placed in competition with offerings of others, all in the name of providing choice and efficiency to the issuers but also the private banks these systems are designed to serve.

While financial technology companies can develop tools for a front to back office service, making them available to the whole industry is a different matter, because, while all issuers use systems, these services have slight variations. "Some issue products with knockin barriers, where the trigger event happens if the underlying is below that barrier and other issuers may have a different way of defining that barrier" which makes it incompatible and a big challenge to normalise all those elements, according to one investment banker. "That's where we are now. People are starting to understand and looking at ways to address that,"

Most recently, developments around technology have dwelled on pricing and trading platforms, but only at the same time



as private banks are seeking ways in which they can add an extra tier to their trading books to reflect the number of investors in a given product and events throughout the product life cycle. Private banks rely on issuers to provide this kind of information and, as demand for post-trade services increases, these issuers have to address this in the back office alongside the operational and risk control capabilities.

Meanwhile, the demand for robust pricing and valuation tools, triggered by regulatory requirements, remains. In 2015, Thomson Reuters launched its Pricing Service Plus, which offers a new capability for structured notes and hard-to-value over-the-counter derivatives, increasing transparency into the evaluated price, methodologies and the market data associated with the pricing of products. The service was a response to new requirements from regulators, enforcing rules such as Dodd-Frank and European Market Infrastructure Regulation, both of which are putting the emphasis on illiquid and complex instruments, with a particular emphasis on derivatives and structured products.

Lifecycle management

Once the problems around pricing and booking are resolved, the buy- and sellside have sought to cover the full life cycle of products, as well as address the hedging needs around different payoff profiles (such as autocallables), underlyings (such as dual-index baskets) and investment terms. As a result of these new requirements, software providers have developed simplified scripting languages and conventions to create and launch products in one platform that covers the structuring, pricing and risk management of structured products and dynamic strategies, as well as other derivative instruments.

"We have been assessing, for some time, what areas could benefit from greater speed to market," said José Ribas, Global Head of Derivatives and Structured Products at Bloomberg. "We had a very comprehensive pricing library covering around 80-90% of the products in the market, but we wanted to develop a technology that would allow us to add more products faster, and be able to cover and structure all products, even if they had not been launched."

These tools "empower clients" and "allow them to innovate irrespective of the vendor providing the tools," said Ribas. In 2014, Bloomberg deployed LexiFi's Instrument Box, a core derivative technology developed by the French software provider that provides a scripting language for contract description and automatic user interface generation, exhaustive life-cycle processing and reporting, generation of optimised pricing code and an integrated solution for document generation.

The two companies expanded their technology integration to support the new Bloomberg Derivatives Library (DLIB) on the US company's financial data and information platform. "One of the qualities we found at LexiFi is the ability to generate the contract description with a very flexible technology which could be integrated with Bloomberg's script language (B-lan) and, on top of that, it generates full cycle events on products," said Ribas. "Technology has helped us to build a system that allows us to process contracts and also to follow the life cycle of those trades."

These requirements are also apparent on the buyside, with order management infrastructures becoming as necessary and widely used on OTC derivatives as they presently are on stocks or bonds, according to Marwan Tabet, Head of Risk Product Division at Murex. "This will give more transparency to pricing, direct connectivity to trading platforms, pre-trade compliance, Mifid (Markets in Financial Instruments Directive) compliance and open new horizons to buyside institutions in making savings on their execution and legal costs on affirmation or collateral management," said Tabet.

"On the sellside, we see more and more differentiation coming from how fast a trade quotation can be provided, to the extent that some large buy side have decided not to contact the slowest banks anymore," said Tabet. "In that regard, pre-trade risk analysis, and more specifically pre-trade CVA (credit valuation adjustment) charge is essential to the sellside institution."

The increasing convergence of technology requirements across structuring, trading and risk management has been tackled by technology and software providers by adding risk aggregation functionality for traders and financial engineers as well as instrument-level granularity, which used to be a requirement at a product development level, for risk managers.

Numerix has been developing a series of these tools since the launch of its CrossAsset platform in 2012. "We've introduced an enhanced a user interface, where our framework for structuring, trading and risk is accessible via an onscreen dashboard," said Steven O'Hanlon, chief Executive Officer and President of Numerix. "Managers can drill down and slice and dice huge multi-dimensional datasets to provide instant response times for complex risk and optimisation calculations. Through the instant analysis, aggregation and visualisation of large volumes of complex and dynamic data users can compare results over various time periods, make 'what-if' inquiries and achieve a timely, more accurate view of risk."

Following Basel and fundamental review of trading book recommendations, the consistency of pricing across functions and pre trade availability of risk, credit and capital charges will be pivotal, according to Tabet. "We offer an integrated platform which brings consistency in the risk engine producing greeks, Var (value at risk), CVA, and in the data underlying all these calculations," said Tabet. "Our platform enables traders to include in their pricing CVA, IM and other components of the total cost of trading, and naturally aligns the P&L (profit and loss) and risk calculations between trading and risk."

Credit risk analysis has become a more important element of the valuation and pricing process, according to Jayme Fagas, Global Head of Valuations and Transparency at Thomson Reuters. "We essentially mimic the process and the way a trader will look at an instrument," said Fagas. "We look at all of the market data inputs including credit default swaps, credit valuation adjustment.

"It's not only about providing access to the price, but also the traceable details of the valuation, with a clear line of sight into the instrument and its value," said Fargas. In the summer of 2015, Thomson Reuters launched a software solution for the automation of reference data and pricing workflows designed to enable back-, middle- and front-office teams to analyse and search across complex data sources, compare multiple pricing options and optimise valuation and risk activities.

The new tool will improve transparency by streamlining data collection while eliminating "tedious spreadsheet-based processes" to simplify Net Asset Value (NAV) and P&L calculations," said Fargas. "Through data consolidation and reformatting, users can integrate feeds directly into existing internal systems and gain insight through access to market-observable inputs and source data that supports evaluated pricing."

The US company also enhanced its credit risk capabilities in 2015 and now provides access to 388 different credit agency ratings alongside the proprietary credit models, "for a more holistic credit risk picture", he said. The credit risk capabilities also include entity hierarchy information, including country of risk data to provide a granular assessment of exposure to risk, fundamentals and content - allowing users to calculate key ratios, as well as news sentiment scoring to facilitate automation of alerts to news that may have a credit impact.

Tools that enable the aggregation of financial instruments from a portfolio construction perspective for risk management purposes are also in good demand. "Structured investment products and structured OTC products have different mid-life risk requirements," said Milind Kulkarni, Group Chief Executive Officer at FinIQ. "OTC portfolio requires constant monitoring risk measures and also the collateral, while structured investments don't need more than a simple mark-to-market and scenario analysis."

To address those needs, the way data is stored and used in pricing libraries and risk systems is critical, said Ribas. "You may have 50 instruments in a portfolio that need a yield curve, swap curve or an overnight indexed swap curve,"said Ribas. "So, instead of having to check each curve 50 times, you can speed up the calculations by combining the tools provided by the pricing, and the risk management tools around underlying assets."

Additionally, technology is also eliminating the siloed approach around some compliance functions by providing one platform in a central system. "This is a very significant development, because you can provide the same service module that you are offering to a portfolio manager or a CRM (Chief Risk Manager) or order execution as a compliance module which will centralise the management of the compliance rules," said Simon Wong, Head Of Sales, Asia-Pacific at AG Delta.

The multiple approach

Fintech providers see a bright future for multi-issuer platforms and a way to deliver their tools as more traders, advisors and relationship managers move beyond early adoption and start using platforms as part of their daily workflow. "It is also becoming mandatory as firms realise the compliance benefits to move away from excel and email onto a more regulatory friendly offering," said Mark Munoz, chief executive at Contineo. "In addition, ongoing pressure to decrease the cost, and the long-time frustration around the complexity and escalating fees associated with legacy enterprise systems is one factor prompting firms to use multi-issuer platforms. With that in mind, it is critical for these platforms to have an open policy to interface and interconnect with other systems used within a bank. That is easier said than done."

This is an area where Fintech providers are having discussions with clients, said Ribas. "We already provide the connectivity multi-issuer platforms around some vanilla products, but the market will evolve via an electronic setup, especially around the more commoditised products; the challenge is to develop those platforms to be able to accommodate flow products and also other more complex structures," said Ribas. "There is appetite in the market to streamline processes around flow and complex bespoke products, and we expect this area to grow."

These platforms are "just replicating" what banks have done in the past when automating the trading around other asset classes, according to Kulkarni. "These platforms will replace the environment in which traders and salesmen got prices for their trades which is a prime function for banks," said Kulkarni. "They have proven successful in other areas such as cash and foreign exchange. We believe multi-dealer platforms are the best place to digitalised the trading of complex products, and, within the next five years, multi-dealer platforms will become a norm in the structured products market and will cover single underlyings, as well as baskets, and every type of popular payoff out there, and will be available in every region."

Investment banks have traditionally developed click and trade tools, but in the multi-issuer platform setup, "we believe independent providers will have an edge as they are not exposed to conflicts of interest", said Ribas.

However, these platforms will not develop as fast as it did with vanilla financial instruments, according to Sadiq Javeri, Head of Product Strategy, Capital Markets And Enterprise Risk at Misys. "This is a pure cost issue, and, in the case of structured products, the costs are not as much in the distribution as it is in the post-trade processing," said Javeri. "For banks, it's very costly to settle and manage the full cycle of products across multiple systems. That's where the main cost of running a structured products business is, and that's where the market will consolidate first. No doubt the structured market will go towards electronic trading, but, if you think why the current focus is on the vanilla side of the market, it's because the back-office challenge and the proportion of trading costs on back-office settlement of vanilla products is not nearly as high as it is for structured products."

Complex, high-yield and custom-built products will eventually be traded in multi-dealer platforms, and, as in the foreign exchange market, the top tier one banks will dominate, according to Kulkarni. "Products where there is a chance for litigation or misselling or any issues around the terms and conditions (no more than 5% of the product mix) will be traded using the traditional reverse enquiry and over the phone setup, but, for the rest of the products that are offered by more than one bank, regardless of how complex they are, they will be traded on multi-dealer platforms," said Kulkarni.

"We believe digitalisation will also help breach the education barrier (two to three years from now) as it will provide graphic elements for people to understand and see visually how products are built and how they react to market movements," said Kulkarni. "People will have access to many sources of information to educate themselves at end client level (surveys, ranking, ratings), and increase their awareness about these products."

> **"Those platforms that can provide liquidity and no conflict of interests will be the winners," said Wong. "The buyside will eventually go with those platforms that allow them to price and trade with the higher number of issuers."**

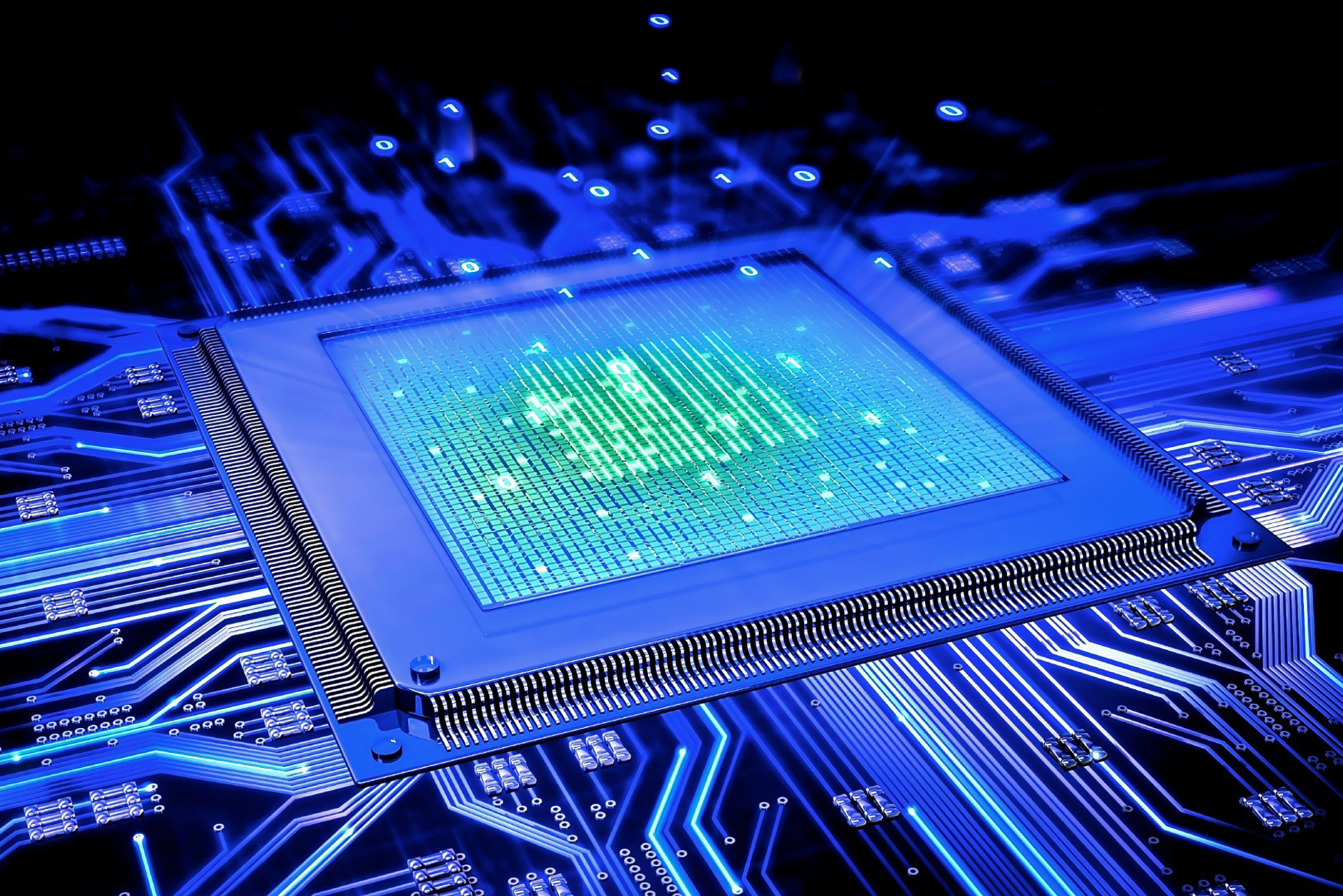
So far, the market has seen two different approaches from multi-dealer platforms, said Jonathan Llamas, business development, structured products, platforms at ITG RFQ-Hub: "[those that] provide a platform to standardise or harmonise workflows within a large universe of products/payoffs, developing a semi automation when it comes to execution such as RFQ-hub; and others that provide full automation and straight through process on a few payoffs only," said Llamas. "Those two approaches are meant to converge at some point. We are already starting the integration of our platform within issuers' systems; whereas the full automation approach is slow expending to new products."

In any case, an important part of any multi-issuer platform will be its liquidity, and issuers and distributors will go where liquidity is available, said Wong. "Those platforms that can provide liquidity and no conflict of interests will be the winners," said Wong. "The buyside will eventually go with those platforms that allow them to price and trade with the higher number of issuers."

The discussion about the right business model persists and the market could very well end up with the two coexisting, one with a more retail investor profile than the other. But the main drivers of these developments (issuers and private banks) are already moving towards the multi-dealer platform setup, and it is expected that tier 2 banks, wealth management companies, brokers and institutional investors will follow suit.

The issues around standardisation of naming conventions and protocols, legacy issues and regional biases, and starting points is something that might take some more time to solve. "But we don't see that as a problem," said Kulkarni. "This is similar to travel online booking, you get different feels depending on the website you are using but the end result is the same."

The outlook for financial technology



Technology Insights

What are the most important developments in the use of financial technology on the creation and distribution of structured products?

What is your outlook for technology and software providers in structured products? Is fragmentation an issue?

Mark Muñoz, Managing Director at **Contineo**

Mark Muñoz, Managing Director at **Contineo:** Private banks are benefiting from the disruption that is happening in financial technology. In Asia, there are over 300 new companies targeting wealth management with tools for relationship managers, advisors and traders, so traditional software vendors are having to figure out how best to adapt.

Fragmentation is an issue for the incumbents, not just software vendors, but banks as well. As in other asset classes, fragmentation is costly and increases risk and the burden of meeting regulatory and compliance mandates. Technology has evolved in such a way that open architecture and open connectivity with standards benefits all participants.

Milind Kulkarni, Group Chief Executive Officer at **FinIQ:** There are two sets of structured products: repeat issuance, and bespoke, on-demand tailor-makes. The first was never a problem as it followed the same automation template as mutual funds or primary market bonds, but the latter is more intricate and error-prone, both during quotation as well as in post trade.

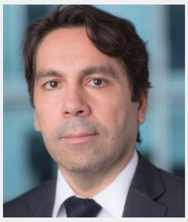
Risk disclosures - matching client risk with product risk - often involve manual intervention, which dissuades distributors, who are willing to forego the relatively high commissions. Some market participants have recognised the potential and started permitting increased flexibility in product construction. Software tools and trading platforms have to match the efficiency objectives, or the distribution cost and risk issuance will, once again, outweigh the revenue and the business will decimate.

Software providers will continue to invest in product-design frameworks and electronic pricing. There will always be some manual intervention, but 95% of bespoke transactions will see near-complete automation, at least for successful players. Different vendors emerging from different entry-points of the trade life cycle value-chain will continue to chip in more features. For instance, pricing vendors will attempt trade processing; back office vendors will introduce valuation; and execution platforms will add reconciliation; but the advantage will always be with those who were conceived as "structured products systems" from the start and weren't the outcome of a diversification of a generic cash and derivatives trading application.

Marwan Tabet, Head of Risk Product Division at **Murex:** The average ticket size is smaler, with a higher concentration on nearly commoditised structured payoffs. Margins are thinner and under regulatory pressure, particularly those relating to capital charges. A number of global players are leaving local markets (typically in Asia) to local banks, because they lack the local client knowledge. Players are concentrating on cost efficiency and time to market.

The consequence is a two-tiered market, based on institution size and geography. A number of local, mid-sized banks, often in emerging markets, see structured products as an area for expansion of customer relationships, but haven't built the human, organisational or technical infrastructure to issue such products. As such, they react to market developments by back-to-backing structures to global banks, while facing the challenge of building a capability to issue structured products, balanced by the cost of equipment and the risk of losing that investment if it doesn't provide the necessary time to market for new products or meet regulatory changes.

Larger institutions, where structuring is established and more commoditised, need to either increase volumes at a faster pace than the market, or discover new, less-regulated niches.



José Ribas, Global Head of Derivatives & Structured Products at **Bloomberg**

José Ribas, Global Head of Derivatives & Structured Products at **Bloomberg:** We have seen recently an increasing number of players and a crossover between banking and technology. This is good for the industry, as the level of service is also increasing. However, as with any other industry sector, with time there will be consolidation.

Simon Wong, Head of Sales, Apac at **AG Delta:** Competition is healthy and will help the market to mature; and we don't see fragmentation as an issue. The main element for multi-issuer platforms is liquidity: the buyside will eventually go with the platforms that allow them to price and trade with the highest number of issuers.

Steven O'Hanlon, Chief Executive Officer & President of **Numerix**

Steven O'Hanlon, Chief Executive Officer & President of **Numerix:** Changing regulation has led to compressed margins and higher capital costs associated with derivatives trading. To survive and thrive, today's practitioners need to adopt a more integrated and holistic approach to risk management, assessing trade profitability and allocating capital. Greater operational efficiency and the integration of risk and capital analytics into trading decisions are critical.

An important theme will be integrating insights from advanced analytics to gain better operational efficiency. This requires modelling consistency, a scalable architecture and making advanced analytics more "accessible" to decision makers at the desk or in the C-suite.

Marc Adler, Chief Architect at **Quantifi:** Fragmented approaches to technology risk management cannot be sustained. Given the focus on reducing costs and a desire to consolidate positions in as few systems as possible, companies are moving towards a more balanced, business aligned and risk-based strategy.

At the same time, regulatory requirements demand more sophisticated risk measures for all asset classes, including structured products. As a result, companies are looking for systems combining workflow, integration, analytics and reporting across a broad array of asset classes. This will have a negative effect on software providers that support only a small number.

Felix Grevy, Director of Product Management at **Misys:** Driven by new regulation, financial institutions are under pressure to produce more calculations in a faster way, which means software providers must have a technology stack which permits such scalability and agility. Consistency is important – software enablers need to allow clients to look at the same figures across all levels, whether it's front office or at a risk level.

How do you address the increased demand for larger scale issuance and connectivity between the sell- and buyside?

Are there tools being developed to cover or develop secondary markets and support both pre- and post-trade workflow?

Sadiq Javeri, Head of Product Strategy, Capital Markets and Enterprise Risk at **Misys:** We see this trend particularly in the vanilla side, and it's a natural evolution of developments around electronic trading which began with single issuer platforms (Autobahn, Barx and the like) for vanilla asset classes, such as interest rates, FX, equities and so on. Investment banks have been developing electronic trading and the ability to build and price products on an automated basis for at least a decade. As investment banks retrenched, because of the cost of capital in the new market environment, the focus on issuing structured products using automated platforms has increased.

Today structured products activity is mainly concentrated around tier one banks that have developed their own trading issuance platforms.

This has evolved in three stages of e-trading: interbank, client facing vanilla and client facing complex structured products (around high margin trades). The question is why this last stage is taking so long to develop, and we believe this has to do with prioritisation. As complex products have become increasingly expensive from a capital standpoint, investment banks are increasingly focused on ensuring their core trading (vanilla) businesses are sustainable. The motivation to standardise distribution and post-trade workflow of vanilla trades has been higher at management levels.

Tabet: We expect to see more and more developments of platforms integrated with multiple issuing institutions. In terms of pre-trade workflows and when it comes to local, middle-sized banks, we see increasing demands for real-time, deal-by-deal hedging of trades which can require complex pre-trade workflows with interlinked real-time RFQ workflows with customers and automated hedging workflows with (possibly multiple) liquidity providers.

Vendors need a well-integrated chain with high automation, for cost efficiency and competitive pricing and product offering: from payoff structuring, through price discovery, to price distribution or automatic request for quotes, client account management, and full life cycle of the products. Post-trade workflow (including deal lifecycle management) is as important as pre-trade for the distribution of structured products.

Kulkarni: The start was with buyer-seller electronic communication to transact first few product variations. It soon included baskets and multi-expiry structures. As it stands, around 10 different structured products variations are live in production on different platforms with majority of the issuers offering either email-based or Fix-protocol prices. The model was an instant hit; the platform was soon rolled out to investment advisors beyond the initial scope which was restricted to dealing desk.

Price discovery to trade confirmation cycle for both FX and equity structured products has become a matter of minutes if not seconds. Given the compliance pressure, platforms come with a myriad of checks around client communication and trade execution. These checks originate from data scattered across multiple sources and pulled into the structured product trading platform via online APIs, wherever practicable.

Post-trade workflow automation between the market maker and distributor is still in its early days, but will mature once the pricing efficiency hurdles are overcome. Secondary market-making for these short-dated products will always be relatively less viable, as compared to cash securities or funds.

Wong: Price discovery challenges have been around for many years, but electronic trading platforms have helped. Clients are also more sophisticated and require new tools to manage their structured products. Tools have been developed to further enhance front office capabilities around (digital) advisory services to make sure advice is relevant and suitable; we're also working on post-trade functionality that help manage the life cycle of products to capture corporate events.

In life-cycle management, there are a number of considerations, such as market risk, as well as credit and corporate risk management. Private banks are getting more knowledgeable and want more control of the products they sell. Having access to product payoff and risk profiles, as well as how products perform, is important for distributors.

Increased disclosure requirements from regulators is also increasing the need for more information. Private banks and wealth managers are driving some of these developments and are actively using these tools.

Matthew Streeter, Capital Markets Strategist, Product Marketing Manager at **Fincad**

Matthew Streeter, Capital Markets Strategist, Product Marketing Manager at **Fincad:** Technology providers in structured products need to adapt their offerings and provide better scalability. We are seeing this through more robust backtesting of product payoffs and seeing how product types are optimised within investment portfolios. With investors becoming increasingly sophisticated with structured products, they are demanding better visibility of performance and risk characteristics.

Ribas: This is happening as a result of regulation and clients pushing for best practice. We started to see this happening once Priips appeared on the regulatory agenda with new requirements for pre-trade, fair value and pricing, scenarios analysis, and increased disclosure. We have seen increased communication between the buy- and sellsides during the pre-trade process. The market has already automated these processes via single dealer or multiple dealer RFQs, and, as a result of those developments, we are also adapting our platform to meet market expectation and react to client demand. Some models are ready to move to an electronic set up.

Banks integrate their models via APIs so that their clients can quote consistently Some clients want to do everything electronically but others want to do some of the parts via voice communication.

Adler: Technology systems need to communicate with each other to share information. In addition to providing applications for end-users, APIs simplify the development of data feeds and allow clients to create custom front-end applications or integrate services within existing applications.

Jonathan Llamas, Business Development, Structured Products, Rfq Platforms at **ITG RFQ-Hub**

Jonathan Llamas, Business Development, Structured Products, Rfq Platforms at **ITG RFQ-Hub:** As a multi-dealer platform, we allow an industrialisation process at a trading level, from price discovery to trading. This massively scales up the request process, hence the distribution. Distribution is following as we are integrating new solutions, not only at a buy-side level, but also to the issuers. We become a means to reach new goals and higher volumes, in a more secure way, complying with regulation, and standardising this very peculiar universe.

Muñoz: There are increased demands for scaling up issuance and connectivity between buy- and sellside institutions, and we are now working on how best to implement life cycle management for our Subscribers.

Matteo Tesser, Chief Executive at **Fairmat:** We are analysing differences between theoretical and traded prices on several retail markets: by using a common methodology for calculating theoretical prices, we observed significant differences in the price quoted by different market makers.

What are the risk and compliance challenges when providing software for different regions?

Kulkarni: The investment psyche in different regions tends to vary by the genealogy of wealth creation, which dictates risk appetite and, hence, the product mix.

Experiences from corporate hedging markets overlap those in private wealth and the worst of the two drives regulation. Some regulators have calibrated their regulations for anticipated adversities. For example, the stock market cannot rise forever; the day a correction happens and structured product investors suffer capital loss, it can no longer be seen as the result of banks miss-selling or client unawareness. Asian regulators have addressed this downside potential in their prescribed client disclosures. Bank risk underwriting capacity is yet to be fully quantified under most regulations.

Client-bound regulations are nothing but a major metric of the checks based on client profile and product characteristics and are relatively easy to automate. With more bespoke products, the systems will have to be smarter to comprehend each product distinctly, instead of applying a broad-brush logic to all products in one category. But the bank or issuer-bound regulations can be very cumbersome and will largely be handled through manual processes, which are informal systems that need time to become more formalised.

Client suitability assessment, collateral sufficiency and margining, pre and post product term-sheets, and risk score checks and most of the client-bound compliance checks are done as part of order-capture or click-and-trade graphical user interface interactions (GUI). This implies a more up-to-date outcome of such assessments compared to workflows not based on online checks, which is common if the front-office order and trade capture system is different from the one for compliance.

Javeri: There is a more homogenous trend in risk instigated globally by the Basel Committee, particularly around the clearing of derivatives and the collateralisation of non-cleared structured derivatives. As a result of these requirements, the specific challenge of computing initial margins and manage collateralised trades needs to be addressed.

Pre-crisis, a large amount of structured products activity was uncollateralised and conducted unsecured OTC, whereas now trades have to be collateralised against their exposure to credit risk. To address new collateral management requirements, we have improved the ability to manage and optimise the movement of enterprise-wide collateral, supporting structured products as well as initial margin calculations, which are now more punitive than they were pre-crisis.

Tabet: This is getting better with the integration of regulation around Basel initiatives and tax reporting across different jurisdictions.

There are persisting differences between US and European regulatory approaches, but nothing that can't be addressed by way of software customisation and standard regionalisation.

We rely on a global customer base and a client services organisation on two levels: regional hubs to homogenise our implementation and support quality standards, and local offices to develop local market granular expertise.

Marwan Tabet, Head of Risk Product Division at **Murex**

Adler: European Union and US regulatory reforms - for example, the European Market Infrastructure Regulation (Emir), Markets in Financial Instruments Directive (Mifid 2), and US Dodd-Frank Act - are far from identical. The complexity of these reforms has major implications on how companies manage strategies, costs and systems to adapt to opposing local regulations.

In countries where the regulatory regimes share common themes, the timetable of these directives can be different - for example, the rollout of central clearing rules for vanilla interest rate swaps in the US and Asia. As a result, a global financial institution operating in the US and Asia is expected to have a disparate set of profitability metrics and cost of capital calculations for the same swap, depending on where it is traded. These regulatory timelines are challenging companies to prioritise regional market developments against global regulatory change. With new regulations requiring more complex risk metrics and calculations, market participants need new valuation methods, incorporating overnight indexed swaps (OIS) discounting, credit valuation adjustment (CVA), collateral requirements, margin replication and funding costs.

O'Hanlon: Challenges in the distribution of structured products or multi-issuer platform players include: inadequate analytics to support more exotic (and higher margin) structures; no front-end dashboard to monitor and handle exceptions; manual workflow (slow and unscalable), high operational risk; lack of standardisation; lack of consistency; resource consuming; unable to handle deal flow; and losing market share to competitors.

Streeter: Topping the list of requirements is an increasing emphasis on structured products pricing look-through and deeper insight into the modelling assumptions to help improve investor transparency.

Muñoz: It's often internal processes the banks must undergo that determines success or failure when trying to implement technology solutions.

What kind of tools do you provide to evaluate risk across the trade life cycle, from the initial risk assessment of a particular product to monitoring it post-trade and generating risk metrics (value-at-risk, credit value adjustment)?

O'Hanlon: We've introduced a unified analytic application platform for enterprise level risk management and the optimisation of capital, collateral and funding for maximising profitability. This unified market risk, counterparty credit risk, and X-Value Adjustment (XVA) pricing engine enables the rapid deployment of pricing and risk analytics including pre-trade decision support, XVA pricing adjustments (CVA/Debt Valuation Adjustment (DVA), Funding Valuation Adjustment (FVA), Capital Valuation Adjustment (KVA) and others), market risk analytics such as Value-at-Risk (Var)/Expected Shortfall (ES) & scenario analysis, Stress Var and backallocated Var, profit and loss attribution/explain report, real-time limits management as well as exposure measures for counterparty risk management.

Kulkarni: Automated proposals can be triggered for products coming closer to maturity or likely to get knocked out, monitoring all fixings during the life cycles, for any underlying and for any purpose. We have not ventured much into Var and CVA till date, as our focus has primarily being on middle office functions for client-bound trades and not market risk management.

Ribas: The goal is to have full coverage from vanilla to exotic cross-asset in a consistent, transparent system. Some of the key elements of the structured products market, such as counterparty risk, is now being reflected in our structured notes coverage.

Regulation has introduced new requirements around infrastructure and data management. How can systems performance and data management be improved? Have the needs of issuers changed around operational risk management?

Muñoz: Regulatory infrastructure and policy demands are increasing the risk in operations, given that some policies act contrary to the latest technology improvements around security. For example, in Singapore, two-factor authentication is required for the use of trade applications and, today, two-factor authentication is most easily delivered through SMS on mobile phones, however these are banned on most trading floors. This forces software provides to use tokens, which are more costly to distribute and maintain and cumbersome for the end users.

Javeri: Regulation has been a huge driver of automation, firstly, because overall profitability constraints have forced banks to look into reducing the cost of trading assets. In addition, regulation has made the cost of capital for structured products more expensive and, therefore, less viable for smaller players. This has resulted in a concentration around a smaller group of larger banks that have the resources to build or invest in electronic trading.

We have also seen an increase in the risk analysis and reporting of structured products. We have taken a long view on how the market is going to evolve and we understand that regulation and increased costs are here to stay, and revenues are not likely to go back to where they were pre-crisis.

Our approach is to ensure that our products are open to accepting and providing information to and from other innovative applications.

Felix Grevy,
Director of Product Management at **Misys**

We offer a componentised, open approach to leverage and add value to banks' existing technology investments. Not only does this save on the immense cost and disruption of large-scale upgrades – it transforms legacy systems into agile, scalable and cost-effective platforms for the future. By externalising key product capabilities into componentised services, we can, for instance, upgrade our pricing engine and collateral management capabilities completely independently of our core workflow product. That is a fundamental change to how things were even five years ago. Our components are not dissimilar to the apps we have in our phones which you can un-install and re-install, and it's completely independent from the core system. Further to that, our pricing engine and risk models can actually be used not just by our own core system but by other vendors' core systems, and it can also take trades from other systems and provide pricing.

Adler: New regulations have mandated that ever increasing amounts of data be aggregated. This data must be subject to rigid governance practices, be brought in to various warehouses and lakes, and be available for stress testing, aggregation and reporting. Often, billions of data points are generated, and must be cubed, sliced and diced. The ever-increasing volume and complexity involved in a typical customer risk run mandates architecture specifically designed to support scalability to 'big data' sets.

Tabet: We see this as the next big thing to appear in US Commodity Futures Trading Commission regulations. The regulator's advisory committee has already made the point that data security and reliability will be important in 2016 workgroups. European bodies seem to be slightly less active, but they will most probably follow. There is the introduction of BCBS239, for which integrated platforms bring an advantage in data consistency and traceability along the chain.

While new technologies, such as public ledger, might eventually become of interest, we have developed a number of features to address security matters at both logical and physical levels.

O'Hanlon: A unified approach can create massive amounts of data. To manage this challenge, our core pricing and risk platform is supported with a risk aggregation cube where all of this data can be stored at a dis-aggregated level, so that risk managers can drill down and ask questions in real-time without having to wait for recalculations. The unified, in-memory aggregation cube – a combination of market risk, counterparty risk, and XVA pricing engine, gives clients the actionable intelligence they need in real-time. As a framework built on the same core analytics, pricing and risk applications can be built on platform with complete model consistency.

Grevy: Misys has invested in a new technology stack, which brings a set of tools, such as Graphics Processing Unit (GPU) fast pricing to memory document management and memory Online Analytical Processing (Olap) cube, to help cope with the new challenges brought by regulations. GPU allows us to compute data much faster at a lower cost. Olap and document store allows full drill down and slice and dice to explain risk data or profit and loss numbers, as required by regulation. We save those data lakes to allow backtesting and to help facilitate operations.

On the issuance side, financial institutions need to properly manage capital charge required under the new Fundamental Review of the Trading Book (FRTB) framework. It will require expected shortfall calculations and will allow banks to apply and use the internal model method instead of the more costly sensitivity-based standard approach.

Streeter: The needs around operational risk management have changed as they relate to scalability in calculations, greater transparency, more robust record keeping, augmented control and audit processes, as well as adaptability in risk reporting functionality. This is a longer term trend, as structured products continue to increase as a non-correlated investment option offering diversification from traditional portfolio allocations, and also as investors look to more defined outcome products.

Ribas: User expectations have evolved and there is an increasing demand for high quality tools and pricing for risk management and post trade. We use the same engine that powers the front office pricing library for our historical full re-evaluation of Var and for our XVA solutions. This provides consistency around front office and risk management, and facilitates the management of data to users. Risk management is our number one growth area.

What are you doing to address the increasing convergence of user requirements across structuring, trading and risk functions?

Adler: Companies that have managed their infrastructure in a fragmented way are realising they lack the flexibility to keep pace with changing market conditions and are turning to technology that can deliver a more intelligent, integrated operational framework.

In this new era of derivatives trading, companies need to adopt a more holistic approach in their assessment of trade profitability and capital allocation. Pre-trade analysis, for both cleared and uncleared trades, can provide timely pre-deal risk metrics that enable users to make risk-adjusted pricing and trading decisions before executing a trade. This type of analysis is usually done on a consolidated basis, taking into account XVA, regulatory charges, initial margin and capital adequacy calculations. For derivatives dealers, the most effective way of identifying potential losses before trades are executed is to have a centralised group aggregate information across all portfolios, run calculations on netted sets, and design strategies to alleviate costs.

Ribas: What regulation, risk management and best practice requires is that the different parties (front, middle and back-office) use the same system, otherwise you are exposed to inconsistencies and errors. In the past, the front office ran an intra-day risk process, while the risk management team ran a separate end-of-day process. This has now evolved: before any trade is executed, the risk analysis is done intra-day. That change requires heavy investment in technology, because you need to upload full portfolios on an intra-day basis to price a new trade.

Kulkarni: Once you know you are selling a framework, you are rarely concerned about individual requirements. The framework must allow adaptable GUI design, suitability rules, payout rules, basic arithmetic, generic Monte Carlo simulation support, a robust workflow designer and template based documentations. Once you have these ingredients, it hardly matters what the product characteristics are, nor what the valuation methodology is or the mid-life requirements are.

A bank that wants to either vary an existing product schema or introduce a brand-new product can do so entirely by themselves in a controlled manner. Once this is done, right from the product term sheet generation, theoretical price computation, price discovery, centralised product catalogue update, retail distribution, order validation, suitability checks, scenario analysis, order aggregation, order allocation, trade confirmation, payment workflow, fixing workflow, coupon workflow, redemption workflow, corporate action impact, reconciliation, mid-life MTM up to settlements and GL accounting all fall in place without having to subject the product to any extra manual intervention or software change.

O'Hanlon: It's well-known that price discovery and the order placement process for structured products is complex, manual, error-prone, and time consuming for both sell- and buyside institutions. Also, processes and workflows can be quite different at each institution.

The latest evolution of Numerix's existing Investment Products Distribution System uses a dynamic UI – comprising a RFQ constructor as a launchpad for RFQs. Our cross-asset analytics engine enables automated pricing of RFQs using pre-loaded parameters that are fed into the system. Multiple calculation nodes for simultaneous pricing of multiple RFQs is also possible.

Geraldine Laussat, Business Development & Structured Products Specialist, RFQ platforms at **ITG RFQ-Hub**

Geraldine Laussat, Business Development & Structured Products Specialist, RFQ platforms at **ITG RFQ-Hub:** We believe in a top down approach, allowing private banks, and wealth and plan managers to execute all their flows via the same system, irrespective of the type of products/payoffs and the underlying asset class. In addition, another key element for them is to preserve their communication with issuers, bilateral. This is not contradictory with the goal to connect to other systems, as long as actors agree with a common language.

How do you address the need for different hedging approaches and advanced pricing and risk analytics on the part of issuers to cover different investment horizons, payoff types, underlyings (dual indices, baskets) and maturities?

Adler: Objects such as multi-curves and volatility surfaces, as well as processes for sensitivities calculations are defined in the same terms across all asset classes. This guarantees overall consistency as it allows clients to choose the same terms across different structure and hybrid products, time horizons, and payoff types. Our framework uses a sophisticated American Monte Carlo engine and scripted language, which calculate prices, sensitivities and XVAs for highly structured deals.

Companies can alleviate costs by using regulatory-approved hedges to reduce market, counterparty and credit risks, and consequently reduce the amount of regulatory capital required to cover these risks. With the recent Basel committee proposal, it has become even more important to treat CVA risk similarly to market risk and allow market hedges to be included in calculating capital requirements.

Calculating sensitivities, even for simple derivatives, is challenging as they are highly computationally intensive, and therefore can be very slow. Given that trades and risk drivers are not subject to the scenario shifts, they can be reused through stored trade level exposures. Finally, the time for calculations of interest rates sensitivities can be significantly reduced by "bucketing", ie. shifting several rates simultaneously instead of individually.

Kulkarni: Structured products assembled using liquid assets or building blocks are not so challenging, a simple product synthesis gives its building block as far as post trade risk management is concerned. Some adjustments are done since these are not independent derivative trades and are done as a single package, but, beyond that, the principles used are the same as those in traditional derivatives. But the longer dated structures or multi-underlying structures rely heavily on correlation and volatility data, which is not always reliable. Heavy-duty simulations and stochastic local volatility models is the way and that can, at times, take hours of computation.

Grevy: In order to conduct a proper risk analysis, of horizon and assets (baskets, correlations, etc), it is critical to have a rich cross-asset library that can take all underlyings under complex mathematical modelling. Our pricing framework uses fast GPU, which allows us to provide fast hedging and risk analytics, and helps issuers or buyers to perform simulation in real time. Our script based pricing library allows us to implement the most up to date mathematical algorithms or alternatively, custom methods created by our customers.

Streeter: One of the core attributes of our analytics software is the flexibility in modelling assumptions and payoff profiles so that we are able to support virtually any financial model, payoff type and investment or hedging strategy that an organisation wants to implement or test.

What have you done to improve the performance of your pricing and risk analytics? What are the challenges to make credit derivatives processing cost effective and better risk managed?

Wong: Automation will not completely replace the reverse enquiry model, and will enhance the whole process. Banks may still prefer to use reverse enquiry for highly complex or big ticket trades, but technology platforms can help by making the enquiry more efficient and minimising the possibility of human error. The sell- and buysides are looking to increase the efficiency of the communication process to monitor properly any changes in the terms in any transaction. Automation can assist around low notional or vanilla products, but it can also add value to complex and high notional trades. Technology might not be key around the RFQ of these trades, but can help with order, tracking and reporting. We don't think there will 100% automation in the structured products market, but we will see technology continue to improve the efficiency and safety of the process.

Ribas: For the vanilla market, the industry has very robust tools such as Financial Product Markup Language (FPML) to provide consistent contract representation for the vanilla market. Trade Reporting (TR) is something that has been standardised. With complex products it is a case of best integration within systems, but there is no standard for these products. The only way to grow that side of the market is by having a standard language that everybody can use to execute trades. What we found with LexiFi, is that their tools could help to standardise the language for contracts around complex products.

Adler: We are working with a number of clients to independently analyse costs and optimise collateral across Central Counterparty Clearing Houses (CCPs). The drive we are seeing is from both clearing members and clients of clearing members who need to be able to optimise the choice of clearing house as well as allocate the expected cost of the selected clearing house.

Grevy: A typical professional grade GPU costs US$2000 and performs calculations up to 400 times faster than classical architecture.

Tabet: As part of the product pricing, the XVA costs of credit derivatives can as well be priced in real-time thanks to our Monte-Carlo simulation engine that includes a Cox, Ingersoll & Ross (CIR++) diffusion model for credit default intensities, and includes a proxy mechanism to project credit names on representatives (eg. credit indices) to reduce the number of risk factors that are diffused.


contineo
Illuminating the market
The most innovative network for equity linked structured products.
Independent network
Industry shaping standards & unique analytics to grow your business.
Live. Now.
Join our community in as little as 30 days.

Directory

AG Delta
1 Fusionopolis Walk
Singapore 138628
Tel: +65 6486 5888

Andrew Au, Chief Executive Officer

www.agdelta.com

AG Delta was founded in 2004. Headquartered in Singapore, offers financial service providers a range of IT and software solutions from low touch multi dealer multi product electronic dealing, to high touch client advisor mobility and workbench tools, aimed at facilitating scalable revenue growth, streamlined efficiency, robust compliance controls and enhanced banker-client experiences

Avaloq
8 Angel Court, 1st Floor
London, EC2R 7HP
UK
Tel +44(0)207 796 3587

Francisco Fernandez, Group Chief Executive Officer

www.avaloq.com

Established in 1985, Avaloq is a technology-driven financial services provider for wealth management, universal and retail banks. It serves more than 140 financial institutions across the world with a fully integrated front-to back-office suite, supported by straight through processing. The Avaloq Banking Suite comprises an integrated, modular banking solution of back, middle and front office functionalities.

Bloomberg
731 Lexington Avenue
New York, NY 10022
USA
Tel: +1 212 318 2000
Fax: +1 212 893 5000

José Ribas, Global Head of Derivatives and Structured Products

www.bloomberg.com

Bloomberg offers a suite of models and risk management analytics for foreign exchange, interest rate, inflation, credit, equity and commodity derivatives as well as convertibles and structured notes. The Bloomberg Professional service provides pre-trade analysis tools to manage asset-specific exposures and support decision making as well as other tools from structuring and pricing to trade communication and execution, including regulatory compliance.

Calypso
One New Change
London EC4M 9AF,
UK
Tel: +44 (0)20 7029 3000

Rick Phillips, Principal Product Manager for Interest Rate Derivatives

www.calypso.com

Calypso is a provider of front-to-back technology solutions for the financial markets. The company offers a cross-asset solutions platform for trading, processing, risk management and accounting. Calypso is used by over 34,000 market professionals in over 60 countries, and serves more than 180 financial institutions.

Contineo
G/F 38 Connaught Road West
Sheung Wan
Hong Kong
Tel: +852 5499 4479

www.info@contineo.link

Contineo is the first industry supported, open messaging network for private banks and wealth management firms to access issuers of structured products. From best price discovery to order fulfilment, our Subscribers benefit by using our innovative technology to simplify their workflow, meet compliance and regulatory requirements, and gain new insights into their business through unique data analytics. Subscribers also participate alongside their counter-parties in shaping business and technical standards for the industry.

"We believe access should be intuitive, technically simple, and available to all participants. This is why we've developed multiple ways for our Subscribers to connect at a low cost and in a way that removes barriers when accessing multiple issuers of structured products. Through the offering firms gain efficiency, reduce operating costs, lower risks, and save time when distributing products."—Mark Munoz, Managing Director

Contineo is proud to count the world's leading private and investment banks as Subscribers.

To learn more and see a demo please contact info@contineo.com.hk

FinancialCAD (Fincad)
Central City, Suite 1750
13450 102nd Avenue
Surrey, BC
Canada V3T 5X3
Tel: +1 604 957 1200
Fax: +1 604 957 1201

Matthew Streeter, Capital Markets Strategist

www.fincad.com

Fincad is a provider of pricing, valuation and risk measurement solutions for multi-asset, multi-currency derivative and fixed income portfolios that can be scaled from the desktop to the enterprise. The firm also offers hedge accounting to avoid using complex spreadsheets and manual processes.

Lexifi
892 rue Yves Kermen
F-92100 Boulogne-Billancourt
France
Tel: +33 1 41 10 02 66

Jean-Marc Eber, Chief Executive

www.lexifi.com

Founded in 2000, Lexifi provides software for the pricing and management of derivatives and structured products, as well as assisting clients in all phases of software acquisition with the following services: evaluation, implementation, customisation, financial engineering, support and maintenance, education, technology and knowledge transfer for custom investment, financing and risk transfer solutions.

FinIQ
Watson's Personal Care Stores Pte Ltd
Chevron House,
Singapore 048622
Tel: +65 6233 6884

Milind Kulkarmi, Chief Executive Officer

www.finiq.com

FinIQ offers sales and distribution platform for banking, treasury and wealth management products. Ranging from deposits, foreign exchange, notes, bonds, funds and shares to foreign exchange and equity linked structured products and OTC derivatives, FinIQ has automated the entire spectrum covering front-to-back functionality. The company serves 70 plus banks in Asia-Pacific region in its pricing and processing efficiency

Modelity Technologies
2 Hashlosha Street
Tel Aviv, 67060
Israel
Tel: 972 7 3337000
Fax: 972 7 3337001

Ayal Leibowitz, Chief Executive Officer

www.modelity.com

Established in 2000, Modelity Technologies Inc. is a privately held company, focused on providing banks, insurance companies and other financial institutions with a platform for financial modeling and portfolio analytics. The firm offers fully configurable, best of breed financial model libraries and a platform for creating and delivering financial analytic content. Modelity's offering consists of two products: Modelity Structures and Modelity/Advisor.

ITG RFQ-Hub
One Liberty Plaza
165 Broadway
New York, NY 10006
USA
Tel: +1 212 588 4000

Jonathan Llamas, Business Development, Structured Products, RFQ Platforms at ITG RFQ-Hub

www.rfq-hub.com

RFQ-hub provides IT and software solutions to increase transparency, liquidity, and accountability in the OTC-negotiated cash equities and derivatives markets. Multi-dealer and bilateral, the firm provides tools to manage the trading workflow between market makers and asset managers. ITG RFQ-hub connects buy-side trading desks and portfolio managers with a large network of sell-side market makers (liquidity providers), allowing them to place requests for quotes (RFQs) in negotiated equity derivatives, futures, options, swaps,

Murex
8 rue Bellini
Paris Cedex 16
France
Tel: + 33 1 4405 3200

Marwan Tabet, Head of Murex Risk Product Division

www.murex.com

Launched in 1986, Murex provides integrated trading, risk management, processing and post-trade solutions. The firm serves more than 40,000 users globally rely for trading, hedging, funding, risk management or processing operations including global money centers, local banks, large asset managers, medium-sized hedge funds, as well as large corporations and energy utilities.

Directory

Mysis

One Kingdom Street,
Paddington, London,
W2 6BL
UK
Tel: +44 (0)20 3320 5000
Fax: +44 (0)20 3320 1771

Sadiq Javeri, Head of Product Strategy,Capital Markets and Enterprise Risk

www.misys.com

Founded in 1979, Mysis is a provider of financial services software covering retail and corporate banking, lending, treasury, capital markets, investment management and enterprise risk. Mysis serves 47 of the world's 50 largest banks; 16 of the top 25 syndicated loan book runners; 12 of the top 20 asset managers; and more than 90 asset managers and hedge funds.

Numerix

99 Park Avenue, 5th FL
New York, NY 10016
USA
Tel: +1 212 302 2220
Fax: +1 212 302 6934

Steve O'Hanlon, Chief Executive

www.numerix.com

Numerix is a provider of risk analytics technology for the pricing, structuring, modelling and valuation any derivative instrument, or portfolio. Numerix risk solutions are targeted at global financial institutions to understand performance, analyse and anticipate future derivatives risks with instrument coverage spanning cross-asset and hybrids, commodities, credit, equity, fixed income, FX, life and inflation solutions.

Quantifi

230 Park Avenue, 10th Floor
New York, NY 10169
USA
Tel: +1 212 784 6815

Marc Adler, Chief Architect

www.quantifi.com

Quantifi provides advanced risk management and analytics for the OTC markets including market, counterparty, liquidity and collateral risk management; pricing analytics for credit, rates, fixed income, equities and commodities; as well as trading tools such as booking, clearing, lifecycle management, PNL, limits and position management.

Structured Retail Products

8 Bouverie Street
London
EC4Y 8AX
United Kingdom
Tel: +44 (0)20 7779 8102

Kris Deslagmeulder, Head of EMEA & APAC, SRP

www.StructuredRetailProducts.com

Launched in 2003 by Dr Robert Benson PhD, MSc, BSc (Eng) - widely regarded as one of the driving forces behind the development of the retail structured products market in the UK – StructuredRetailProducts.com has evolved into the leading online resource for the global structured products community with coverage of retail, institutional and private banking markets.

Our dynamic online database of structured products (the most comprehensive in the world) contains over 12,317,633 individual product listings from 2855 companies, representing total sales of over $7.9 tn. and counting. Our product and market data spans over 16+ years across 52 different countries and is supplemented by extensive independent analysis, daily news, people moves and exclusive interviews from key figures within the structured products space.

StructuredRetailProducts.com has become an invaluable tool for a wide range of institutions involved in the manufacture and distribution of structured products across the globe. We specialize in company-wide, corporate access. Our clients include the world's largest investment banks, index providers, regulators, law firms and distributors.

Sungard

340 Madison Avenue, 8th Floor
New York, NY 10173,
USA
Tel: +1 646 445 1000

Jens Persson, Product Manager for Cross-Asset Trading

www.sungard.com

SunGard Financial Systems was acquired by FIS on November 30, 2015. Sungard provides software and IT services to institutions in the financial services industry with a focus on automating the processes associated with trading, managing investment portfolios and accounting for investment assets. Users include asset managers, traders, custodians, compliance officers, treasurers, insurers, risk managers, hedge fund managers, plan administrators and clearing agents.

Thomson Reuters

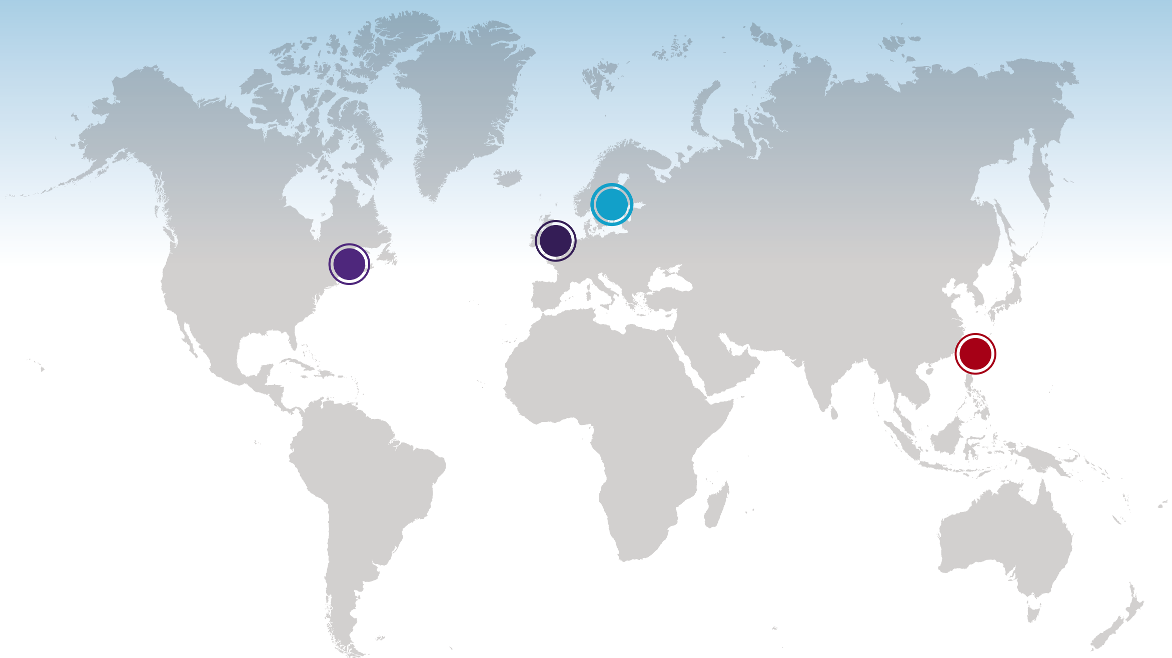
3 Times Square, 3rd Floor
New York, NY 10036
USA
Tel: +1 646 223 4000
Fax: +1 646 223 5494

Jayme Fagas, Global Head of Valuations and Transparency Services

www.risk.thomsonreuters.com

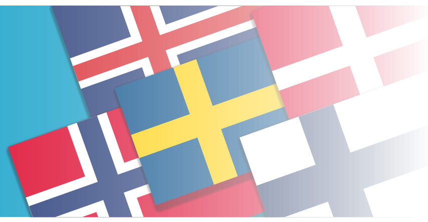
Thomson Reuters is a provider of products and services covering managing valuation risk, pricing and reference data integration, distribution and management and managing content and reference data. Its coverage includes over 6.5 million securities, assets in over 175 exchanges in more than 90 countries and up to 20 years of price history.

UPCOMING CONFERENCES



Asia-Pacific
Structured Products & Derivatives
Conference **Hong Kong | 19 September 2016**

Europe
Structured Products & Derivatives
Conference **London | February 2017** (Date to be confirmed)



Nordic
Structured Products & Derivatives
Conference **Stockholm | June 2017** (Date to be confirmed)

Americas
Structured Products & Derivatives
Conference **Boston | June 2017** (Date to be confirmed)

For more information about our sponsorship opportunities, please contact:

Emea & Apac

KRIS DESLAGMEULDER,
Kris@StructuredRetailProducts.com
T: +44 207 779 8201

Americas

JOE BURRIS
Joe@StructuredRetailProducts.com
T: +1 212 224 3458