

Transparency, flexibility and liquidity – redefining standards in electronic FX options

As the FX industry enters into a new era of electronic trading for FX options, Frances Maguire examines the key role that technology is playing in the provision of new and additional services whilst redefining standards in the way these instruments are traded.

There are high hopes that even instruments as complex as FX options can be fully electronically traded, bringing not only greater convenience to existing users but also attracting new customers. For this reason, both banks and systems providers are investing heavily in smarter trading technology, rich functionality and better integration techniques to smooth the transition to electronic trading for FX options.

FX options has already one multi-bank platform and now front office systems provider, SuperDerivatives (SD), has recently launched an anonymous multi-bank trading platform for bespoke OTC derivatives. As an anonymous platform, with no broker fee using prime brokers for clearing, it could almost be regarded as an 'exchange' for OTC products. In its first phase it offers bespoke FX options in major and emerging markets currency pairs and is aimed at transforming the way FX options are traded.

Electronic platforms

Zohar Hod, Vice President, Strategic Sales, at SuperDerivatives says there are currently two types of electronic execution of FX options: exchange-traded, such as the Chicago Mercantile Exchange (CME), and through e-commerce single bank platforms. Both are fairly limited in terms of the strikes and tend to be vanilla options. He says: "Creating a barrier or some kind of variation of a strategy for FX options can be not been done on a single-dealer platform, or on an

exchange. This is where the difference between the existing systems and SuperDerivatives starts."

SuperDerivatives started life as a pricing platform, not as an execution platform, and many banks use SDX to be able to do all their pre-trade analytics, bid and ask pricing, credit checks and back testing, as historical volatilities since 1994 are stored there. The additional integration of the new trading offering provides the first multi-dealer, anonymous, execution platform that shows 'the best of the book' trades. "What has happened is that not just due to regulation, and because FX options are going to be centrally cleared, but also because buy-side users have started using multiple prime brokers and multiple clearing agents, the need for a multi-dealer platform has emerged."

The new SD trading platform is anonymous from both sides, both the buyers and the dealers presenting the options' pricing. Few banks have the technology today to stream FX options' prices directly from their desks through an API. "What we have enabled is that prices can be both published through an API or entered manually to make markets. The buy-side is also protected from the fact that the market does not know who you are and what your positions are," Hod adds.

Cloud offerings

Hod believes that five years down the road the main technological changes to the way FX options are traded will be the ability to use a cloud. "All of our platforms are provided as complete cloud offerings. There are no applets to be downloaded, they can all be accessed by logging into the system, remotely, and they are completely provided in a cloud."

Where once there were security concerns about cloud computing, Hod believes the wider adaptation of cloud-based computing is overcoming this. The buy-

side is leading the way, he says, because they are asking for a reduction in IT and integration costs, and they are adopting more rapidly, so the tier one and tier two banks are following.

For now, Hod believes the banks are at a crossroads. On the one hand they want to keep their clients close but this is becoming less clear as a proposition. While single bank platforms serve well for spot trading, Hod believes it is natural for FX options to come into the foray of wider electronic services.

He adds: "The increased complexity of the e-service offerings, and the ability to offer more complex services electronically, is definitely something that everyone is looking to offer, whether it is a single

platform or a multi-dealer platform. The connectivity to multiple price brokers and execution venues through a single window is becoming more in demand and the ability to provide more added value services as part of e-commerce services is something everyone is working towards, not just the addition of more complexity into the execution but other services such as portfolio management and more analytics. All of these functions are slowly going to creep into the e-services, where once they were hard to produce due to the legacy IT infrastructure of the banks and prime brokers."

Central clearing will also push banks towards multi-dealer platforms, as it will put the focus on multiple credit lines. Hod says: "The move towards creating more centralisation of position-keeping and exposure





Zohar Hod

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will reduce banks’ profitability because the process will become more electronic but at the same time it will allow them to look at their clients’ exposure and give them some advantage to centralise assets.”

High frequency trading and algorithms will also come into focus for FX options, Hod says, although it would be a little premature to say that it is happening now, due to the lack of transparency. It will take between three to five years from a technology perspective and from what the dealers are going to allow – when algorithmic trading first came into the equity market many dealers blocked those algorithms. “The risk versus the rewards for the dealers and for the participants in the market is still not there for FX options,” he says.

Single platform initiatives

One major player in this market, Credit Suisse, is in the midst of incorporating its FX options platform, Merlin, under Credit Suisse PLUS, a suite of innovative client-focused electronic solutions which brings together the bank’s research, analytics, trading and execution capabilities for fixed income clients.

While the process is ongoing, Merlin currently provides the ability to trade strips of vanilla and first-generation exotics alongside other more sophisticated products.

Additionally, about a year ago, Credit Suisse launched an automated securitisation platform which enables users to trade securitised FX strategies more easily. Joerg Schmuecker, Head of Fixed Income Derivatives E-Commerce, at Credit Suisse says: “This enables clients to choose the details of a trade and, with the click of a button, execute a transaction which automatically settles through Clearstream or Euroclear without the client needing any specific back office capabilities,”

Schmuecker says the bank is getting positive feedback from the roll-out of Locus, a bespoke Credit Suisse platform, providing live and historic data, research tools, and pricing engines for the foreign exchange market as well as other asset classes. This solution provides easy access to a vast range of market information that can impact exchange rates and delivers the tools and data needed for trading

All of these analytical tools will be accessible through Credit Suisse PLUS, and Schmuecker says that, together with Merlin, this will provide clients a powerful execution solution for FX options, giving them access to historical analysis on how volatility has moved as well as offering other tools all under one roof.

Client needs

By expanding the product range, Schmuecker says the bank is more able to provide for differing client needs. For example, corporates tend to trade structures that are subject to hedge accounting rules so the bank has added products to accommodate this. “Furthermore, we have built the securitisation platform specifically for third party agent banks, so they have an easy way of getting access to structured products without having to implement OTC settlement systems and related infrastructure, whereas hedge funds, and other relative value players, are more interested in Locus and Merlin because they bring together execution, research and analytics. For every group of customers, we are looking to develop the right products and bring them together under the Credit Suisse PLUS umbrella,” says Schmuecker.

In some cases, catering to different client needs simply means building a different GUI (Graphical User Interface) to the same product, says Schmuecker.

While high frequency trading is growing in other sectors, it hasn't taken off in the FX options market, according to Schmuecker." The Chicago Mercantile Exchange (CME) has 5% of the market liquidity, and there is no other electronic venue in FX options that has the kind of liquidity needed for high frequency trading. The current market structure is not suited to high frequency trading and the complexity of the product, the way it is quoted and how it works, is slightly less suited to this form of execution. However, it is very likely that HFT will be available in five years' time, he said. Few banks show electronic liquidity to HFT traders although Credit Suisse does have some clients trading directly with the bank on this basis.

Integration

The broader growth of electronic trading for FX options is, however, continuing and is attracting a new breed of customer through better integration with electronic FX options platforms. "We are seeing the same process in FX options as we have seen in spot – once the product is more accessible electronically, new players come in and volumes rise," says Schmuecker.

But, while customers are building interfaces internally across their different electronic trading platforms,



Schmuecker also says there is a move towards a less GUI-specific and service-orientated architecture. The focus is more on getting the immediate service than building specific user interfaces, he says.

"Electronic access is making it cost-effective for more clients to trade FX options. The securitisation platform means that any bank that can settle securities can now start trading FX options with us. They don't even have to have a credit line with us because securities settle using delivery versus payment. This changes how the product can be marketed."

Credit Suisse created PLUS to respond to client demand for cross-asset class trading and to integrate resources for clients. The bigger focus, says Schmuecker, is to deliver a full suite of electronic solutions under Credit Suisse PLUS, and to continue to integrate their specialized research and analytics capabilities as well as build out the STP capability for FX options which will make trading and allocations easier for clients.

Out of the box

With high penetration across both the sell-side and buy-side, it is no surprise that Murex is also investing heavily in a solution for trading FX options that can be easily integrated. A key feature of Murex's MX.3 system is to provide a rich integrated platform in which analytics, pricing, distribution and risk management functionalities are fully integrated and available out-of-the-box, while these components remain logically distinct to allow institutions to leverage on the openness in specific areas, such as analytics, without added integration cost.

Franck Dewannieux, Product Manager of Murex e-Trading platform, says: "When an institution integrates its own model for an existing product, no specific work is required for the distribution and risk computation components to use it. In order to facilitate the integration of these functionalities within the bank's architecture, MX.3 provides a layer of Web Services that give access to a broad functional coverage (pricing, limits checking, RFQ workflows, operations, reports, etc.) and that rely on industry standards to offer state-of-the-art scalability, resilience and security features."

All data generated by the trading activity is available to build MIS reports based on metrics such as the quote/hit ratio per product, currency pair, customer tier, volatility level, spread level, etc, an important feature for strategic analysis.



Franck Dewannieux

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According to Dewannieux the MX.3 platform design was based on Murex's vision that all supported financial products, from the simplest vanilla option to structures, hybrid structures and complex exotics needed to be available for electronic dealing. He says: "Our clients can natively offer electronic trading on any financial product available in the platform. An extremely comprehensive set of products are natively available out-of-the-box and our clients can use our structuring tool and extension framework to define their own; all these are available for e-services without the need for any specific work."

Much of the development work for trading FX options electronically is in unknown territory but the fact that the focus is very much on integrating options into fixed income and cross-asset platforms means that the work is paying off and FX options are fast-catching up other asset classes in terms of electronic trading.

Customised solutions

Stephen Best, CEO of FX Bridge Technologies, says the company has recently added customisable strike price, date, and amount FX options pricing so users can trade any date or strike price and quantity they

need, as opposed to static exchange strikes, lots and dates. Further down the road, the FX Bridge platform will be further extended to offer pricing for exotics, such as knock-ins, knock-outs and binary options. FX Bridge is also building automatic execution capabilities for configured strategies.

In addition to offering an options platform, the firm provides banks and brokers with a derivatives platform. "We fully support contract for differences (CFD) trading and options on CFDs. This is notable because there is a groundswell of interest around our CFD initiatives, particularly single stock and equity index CFDs. Equity traders are huge users of options, so our clients are looking to offer CFD options. In conjunction with our FX and commodities capabilities, we provide clients with technology that support the products they need to grow their businesses."

FX Bridge technology is highly flexible to serve the vendor's wide range of bank and broker clients, which, in turn, serve a wide variety of retail and institutional market participants. In terms of pricing, there is flexibility to enable users to have separate spot and options price feeds from different banks, which can be integrated into one platform for them. FX Bridge's platform can be further customised to support varied liquidity models, whether the bank or broker wants to manage an options risk book or pass the risk, in whole or in part, to one or more market maker banks. An analytics package enables end users and risk managers to look at the thousands of options available and come up with different strategies and risk scenarios.

He adds: "We have a range of trading, analytic, risk management, and post-trade solutions, delivered as modules and APIs. These are all tightly coupled to ensure low latency, something that is always going to be important regardless of what GUI or API the user is connecting through."

Growing market

The FX options market is a growing business and there are increasing numbers of electronic offerings coming to market – it is market that is ripe for automation. FX Bridge's clients are primarily market making banks, providing liquidity, and broker-dealers and CFDs dealers, who are taking that liquidity. Best says there is more room for automation in the institutional space and FX Bridge has spent a lot of time talking to the market about what products they would like to see. He says: "I think it is clear that on some levels they would like to see a lot of tools that they currently have



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for spot FX trading, which means better pricing and better aggregation, and we are working on this.”

While there are some HFT trading strategies being employed, Best agrees that the liquidity and connectivity needed for HFT in FX options is only available, in a limited way, on exchanges and, he believes, it will be more than a year before there is much broader API connectivity for HFT.

For the FX options market to grow as a whole, Best believes there needs to be broader support of electronic delivery from banks, similar to spot and forwards, where almost all banks have some kind of offering. “There is a diverse set of requirements. For example, one of the largest groups of users of FX options is corporates so there is a requirement to be able to deliver electronic execution for the typical types of hedging strategies they like to do – strategies to protect their foreign payables, imports, exports etc. Then, the broker-dealer market, dealing with hedge funds, is looking for electronic aggregation of pricing and liquidity. There is still a long way to go in terms of the development of functionality for competitive pricing.”

The retail market is also embracing electronic trading platforms for FX options, with a growing number of retail aggregators in the spot market differentiating themselves by offering FX options. Best says the growing number of FX brokers offering FX options to retail investors will rapidly take market share.

He adds that because it is a lot easier for a client to be able to leverage existing technologies as opposed to combining multiple technologies, the strength of FX Bridge’s solution is that enables clients to add asset classes, such as commodities, equities and equity indices, alongside FX.

Divergence

One of the early providers of FX options, Deutsche Bank, is continuing to add options strategies based on client demand, according to John Bartter, head of Autobahn Options E-Commerce, at Deutsche Bank. He says: “On the back of this, we extended our currency offering to include streaming rates in non-deliverable emerging market currencies. We also provide streaming volatility grids so clients have an expanded overview of current options prices.”



John Bartter

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In a bid to facilitate the better integration of pricing, distribution, analytics and bilateral trading features on to its FX Options platform, Bartter says the bank's biggest effort was to introduce an options orders platform that completely enhances the pricing and execution experience. "This platform addresses both pricing and efficiency by providing a price alternative to the displayed bid/ask spread. The best value to the client is when their order gets filled within the bid/ask spread," he adds.

Bartter says that as the FX options market matures there will be a greater divergence between simple vanilla trades and complex structures. On the vanilla side, there is a focus on quick pricing and execution as various platforms now provide streaming pricing similar to FX Spot. "You also have the ability for back-end STP to improve automation," he adds. "For more complex structures, you are seeing more exotic products being released onto platforms along with enhancements to multi-leg structuring geared toward making the pricing of multi-leg products more intuitive."

He agrees that the use of complex trade execution techniques involving algorithmic and high frequency FX Options trading is unlikely to be a strong focus for the main price providers in 2012. Bartter believes that price providers are investing most of their time and technology in addressing upcoming regulatory requirements rather than looking to manage individual complex execution streams.

Going forward he believes there will be still further divergence between flow options and complex options. According to Bartter, flow options will continue to focus on enhanced execution whereas complex options will focus less on execution and more on the pricing experience of the client.

As one of the first to market, Bartter believes Deutsche Bank has already dramatically changed the way the market trades FX options. He says: "We were the first platform to roll out an Automated Options Order Book. This is a major change to the way options can be executed on electronic platforms by allowing clients to request specific interests directly to the trading

desk. It also allows you to manage a specific interest over several time zones."

More accessible

Likewise, the first licensed operator in the forex market in Poland, TMS Brokers, is utilising more sophisticated technology to offer access to make spot, forwards and currency options, instruments that were until recently available only to banks and large international corporations, more widely accessible to new users.

Mariusz Potaczała, Chief Executive Officer, President of the Management Board, at Polish FX, CDS and derivatives brokerage firm, TMS Brokers, says that uncertainty about future exchange rates is encouraging more and more importers /exporters to take some action to eliminate, or at least reduce, the risk of adverse currency fluctuations and that small and medium sized companies are increasingly hedging currency risk by using currency forwards and options, because they can trade them using electronic trading platforms, like TMS Direct.

He says: "Most financial institutions, which provide foreign exchange advisory services, offer clients hedging strategies based on forward contracts, currency options and their various combinations and advisory services providers

focus on matching the opening and closing the forward transactions or develop more sophisticated strategies based on combinations of options and currency forwards."

Due to rising foreign revenues of Polish enterprises, the higher exchange rate volatility, as well as the dismissing perspective of the Polish accession to euro zone/ monetary union, Potaczała says it is expected that there will be increased demand from Polish companies for hedging business strategies. "What makes these more popular is also the fact that the rising foreign exchange risk directly affects the financial results of companies at the operational level. It seems that companies are increasingly willing to cooperate with independent advisors who will assist them in decisions on professional currency risk management," he adds.



"An inability to carry out foreign exchange transactions, after the standard working hours of Polish banks, greatly reduces the effectiveness of hedging strategies they use and exposes companies to additional risks associated with price volatility,"

On TMS Direct, forward transactions are made on the basis of the so-called deposits, which, depending on the currency pair, typically range between 0.5% -2% of the nominal value of the transaction. This main advantage of this is that the possible loss of capital on the specific instruments is limited only to the amount of funds paid into an account. Potaczała says: "If these measures are insufficient to cover the required deposit, the transactions are automatically closed. This gives clients a sense of security, even when dynamic changes in the market occur, because the moment of closing our positions is known in advance."

TMS Direct also offers attractive trading terms. Spreads on the Polish currency pairs, in standard trading hours, are as around 30 pips, much less than the quotations offered by the majority of Polish banks, where spreads are about 100 pips. Potaczała says: "Maintaining such low transaction costs is possible by accounting exchange rate differences of transactions, without physical delivery of currency."

In addition to standard transactions of buying / selling currencies, customers can also use various types of

pending orders, e.g. limiting the potential loss (stop loss), or orders connected to purchasing currency, predetermined by maximum limit, which are realised only when the price reaches a particular price level, defined by the customer.

"It is very important especially because transactions can be realised on a platform almost 24 hours a day, five days a week. This is a key feature for institutional clients. An inability to carry out foreign exchange transactions, after the standard working hours of Polish banks, greatly reduces the effectiveness of hedging strategies they use and exposes companies to additional risks associated with price volatility," Potaczała says.

The Polish broker has recently added a new application, Options Board, to the TMS Direct platform, enabling users to compare prices and sensitivity of instruments, depending on the type of option, strike price and expiration date. The application also enables traders to find an option with defined Greek ratio, as well as to compare the relation between strike and option premium very quickly. Moreover it can be used for advanced speculative strategies which consist of several types of options. Based on this it is possible to determine strategy rations such as: delta, gamma, theta and vega in advance, and modify them according to preferences.

Says Potaczała: "Therefore companies which hedge currency risk transactions can take advantage of this application both to find the option that will best suit their needs, including time, cost and break even point, and create so-called synthetic option with delta-hedge strategy. Having in mind the above, the application becomes very useful tool in speculative, as well as in foreign exchange risk hedging transactions."

Conclusion

2012 promises to be a pivotal year in the evolution of electronic FX option trading platforms in both the Institutional and Retail FX markets with many commentators predicting significant growth in the use of these instruments.

As always technology will have a key role to play in shaping demand which is neatly summarised by Zohar Hod who says, "The real time aspects of trading FX options, the ability to execute on a multi-dealer platform, the ability to reduce operational risk and enhance the work-flow electronically and finally the delivery of these platforms over a cloud is where I see the future going and where I see the changes in the market coming."