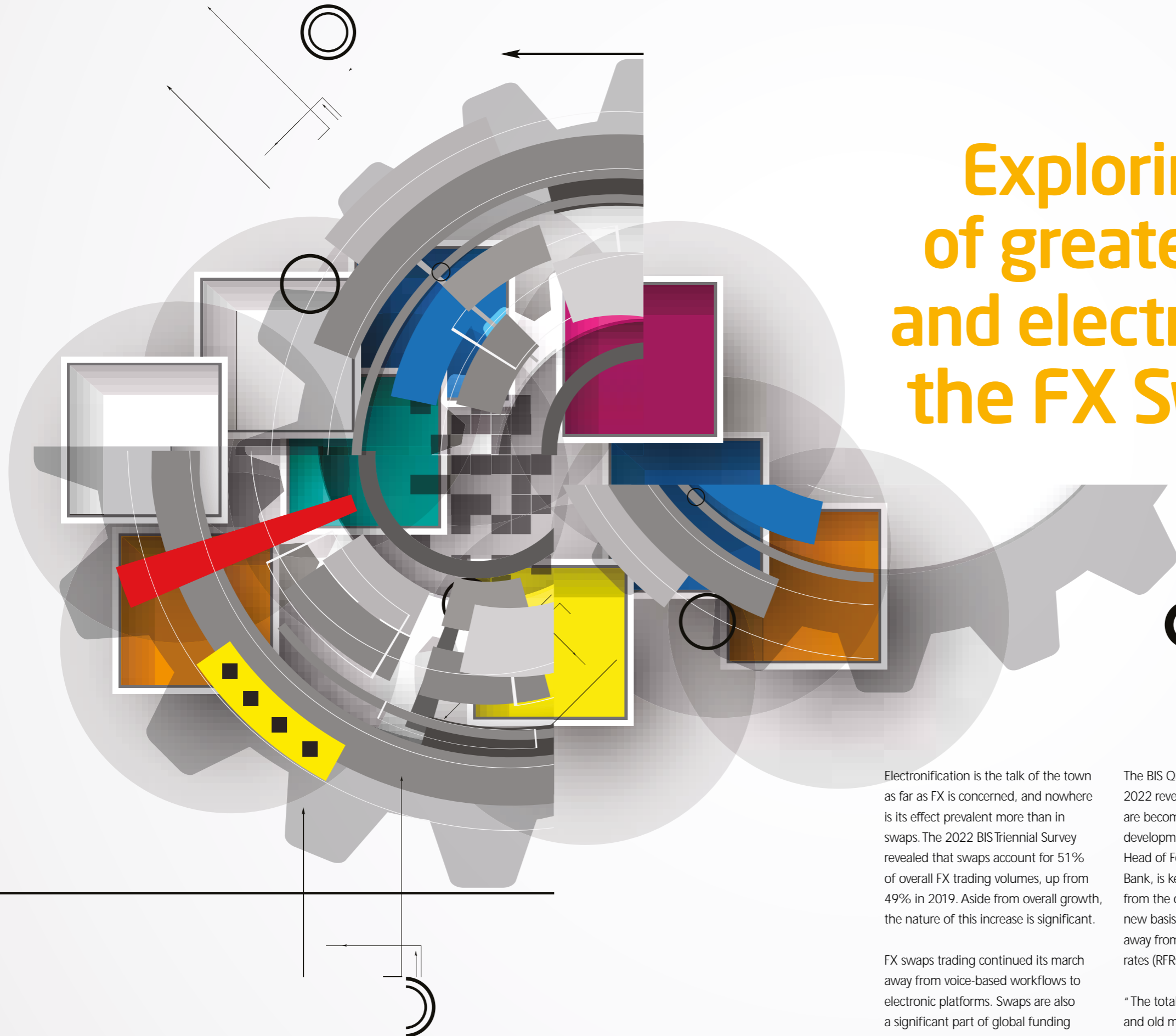


Exploring the impact of greater automation and electrification in the FX Swaps market

By Vivek Shankar



Electronification is the talk of the town as far as FX is concerned, and nowhere is its effect prevalent more than in swaps. The 2022 BIS Triennial Survey revealed that swaps account for 51% of overall FX trading volumes, up from 49% in 2019. Aside from overall growth, the nature of this increase is significant.

FX swaps trading continued its march away from voice-based workflows to electronic platforms. Swaps are also a significant part of global funding workflows as institutions are choosing them over repos and money markets. Add to this the transition away from LIBOR, and the swaps market has witnessed several interesting developments.

The BIS Quarterly Survey in December 2022 revealed that Basis swaps are becoming more prevalent, a development that Shuo Wu, Global Head of Forward eTrading at Deutsche Bank, is keeping an eye on. "Shifting from the old cross-currency swap to the new basis swap is part of the transition away from LIBOR and towards risk-free rates (RFRs)," he says.

"The total volume between the new and old might have slightly increased during the transition process, as we have more than one RFR per currency – ESTR and EONIA for EUR, for example. However, things should stabilise once the new benchmark has fully taken over."

How has the swaps market been growing, and are there any risks to these developments? Here is a deeper look at this fascinating corner of the FX world.

GROWTH AND ELECTRONIFICATION

The emergence of basis swaps is changing how firms are approaching the market. Marco Kuper, CPO at DIGITEC, lists some of the trends unfurling. "Trading firms are now building their curves using OIS/RFR," he says. "As trading firms look to alternatives to broker feeds, they are building ever more sophisticated pricing models which increasingly go beyond existing market data, to include yield curves and inferred FX swap points."

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Shuo Wu

institutions using swaps as a source of funding compared to repos as a key driver, given the former's lower capital and margin requirements.

Robin Nicholas, Head of Swaps Product at 360T, highlights another cause for growth. “Suggestions that central bank swap lines, put in place after the credit crisis, are no longer needed as the swap market can support any future funding need has added to perceptions of their suitability as a funding instrument,” he says.

Wu remarks that volatility has also played a role. “Since FX swaps are mainly used for funding and rolling spot positions into future dates,” he says, “the two major factors influencing FX swaps market volumes are underlying currency volatility and short-term interest rate volatility. Both have been on the higher end over the past 12 months.”

“The FX Swaps market has grown due to clients using them as a source of funding and to hedge long-dated exposures, and (in the most recent BIS survey) increased interdealer activity at the short end,” Kuper adds. “Combining

this activity with the market becoming more electronic, there is now greater participation, greater speed and lower latency, and increased transparency.”

Increased electrification has been a steady theme in swaps for the past few years. To those firms that were on the fence regarding its viability, the COVID-19 pandemic offered final confirmation. Despite high volatility and restrictive work environments, traders discovered that electronic workflows worked extremely well, even if they needed a little voice-based supplementation.

The events of those years have led to a rise in the demand for price transparency. The swaps market appears to be borrowing evolutionary lessons from spot, much like spot borrowed from equities. “One example of this is the different strategies being employed by APIs streaming two-way firm liquidity,” Nicholas says. “Some are providing top-of-book pricing that regenerates if hit, while others show full amounts.”

Wu notes that this borrowing occurs due to every electrification evolution catering to a few basic needs. “Demand for fast, reliable, and alternative execution for risk transfer, alongside growing demand for market surveillance and reduced transaction costs are the common factors behind every electrification evolution,” he says.

Does this mean we can expect voice to disappear soon? Kuper doesn't reckon so. “We expect to continue to see a small role for voice-trading in parts of the FX Swaps market with its complex requirements, even in an increasingly electronic and automated interbank market moving forward,” he says. “Voice worked very well as a safety net in volatile markets, making the case that a hybrid working model is the best solution.”

OVERCOMING HURDLES TO AUTOMATION

Perhaps the best way of examining the remarkable rise of electronic swaps trading is to list the challenges present in this market. As every market observer has noted, swaps have lagged behind the rest of FX in automating workflows.

Credit pricing remains a significant challenge. “The pricing is different for every client depending on their CSA and collateralisation situation,” Wu explains. “Pricing can also vary a lot from bank to bank for the same client, driven by banks' operating models, which translates into balance sheet cost and funding cost.” All of this is before addressing the standardisation of the process and moving it from OTC to exchange.

Nicholas points out some of the work 360T has executed to overcome these challenges. “Credit and risk departments have been understandably wary of any model that requires additional credit hard carve-outs and many internal credit systems were not ready to connect to external APIs,” he says.

“We built a suite of solutions including FIX and REST APIs, partnered with industry utilities like Cobalt, and launched a sophisticated limit monitoring service. These options cover the majority of use cases and set the industry on a path to fully automated credit for FX swap trading.”

Aside from credit, accessing accurate pricing tools used to be a significant hurdle. “It's not a simple process to calculate 20,000 prices along the curve, which used to require huge systems operating on dedicated servers,” Kuper explains. “Typically, the top banks had this technology and the rest of the market used a spreadsheet-based or ‘Frankenstein’ setup of systems and extended solutions not initially designed for this complex pricing purpose.”

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Robin Nicholas

The rise of pricing systems based in the cloud has changed this picture, making electrification more cost-effective. Wu notes that cost was a barrier to growth previously. “The margin per trade for FX swaps is very low compared to spot and futures,” he says. “On top of that, every bank has a different view of the market mid. When aggregating 5-10 bank quotes together, clients often receive choice or inverted pricing.”

Increased swap pricing transparency is therefore a combination of cost-effective infrastructure and the prevalence of data. Kuper highlights how this picture has changed, given the rise of the cloud and increased electronic adoption.

“Before the launch of the DIGITEC/360T Swaps Data Feed (SDF), prices mainly came from broker desks or banks ‘recycled’ the pricing of other liquidity providers,” he says. “For banks and traders to fully build and maintain their own curves, it is and has been unrealistic to do so for more than a few selected currencies. The SDF now offers a much better alternative.”

Products like the SDF are spurring further growth in swaps since greater data volumes create more price transparency. As transparency increases, usability improves, leading to more market growth. In addition to innovative products, Wu lists a few initiatives improving the swaps trading infrastructure, “Creating an exchange-traded FX swap market for banks (CME FX LINK, 360T SUN or Reuters forward matching,) standardising FX swaps by removing the credit component, and offering alternative ways for clients to trade like P2P matching and algos,” he says. However, Wu cautions that

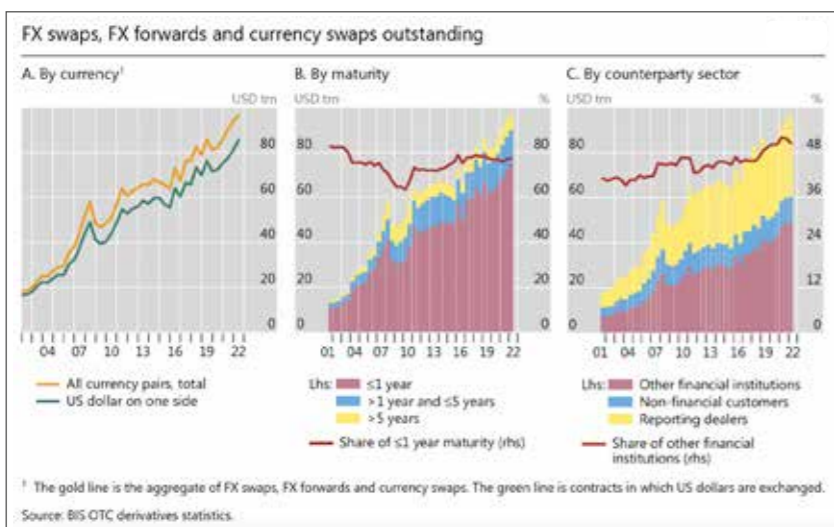
swaps will probably never become fully standardised.

“Both banks and their clients need optionality, so they can tailor the solution and optimise how they do business with each other on a case-by-case basis,” he says.

Kuper points out that compliance needs are driving a few automation trends. “Compliance departments have highlighted the shortfalls of using Excel and the market is finally moving towards robust and resilient pricing solutions like DIGITEC's D3 Pricing Engine,” he says.

To realise this need to become more data-driven, firms are expanding their use of APIs. “The desire to optimise platform presence and reduce technical exposure to too many providers has seen a shift towards aggregation that supports the increased use of APIs,” Nicholas says. “API development has naturally extended from credit checking and order or execution submission to include STP of execution drop copies and market data collection.”

He continues by highlighting another instance of the swaps industry installing processes to increase resilience, aside from electrification. “MTFs and SEFs



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Marco Kuper

are here to stay, and the burden upon the venue and participants to adhere to a common set of rules is going to continue to rise,” he says. “Couple this with the rise in credit automation, and you get a much more reliable means of transacting FX Swaps.”

NEW OPPORTUNITIES AND THE HYBRID APPROACH

Kuper is optimistic about the prospects further electronification brings in swaps. “Further electronification, particularly when fuelled by the rise of interbank platforms, will enable more participation, increased transparency, and, therefore, more efficient markets,” he says. “The challenge now is to provide the market with the tools necessary to participate in this increasingly electronic and automated market.”

When quizzed about potential new opportunities for LPs that a maturing swaps market might bring, Wu notes that optionality and flexibility are critical features stakeholders evaluate. “As with consumer products, the desire for optionality applies to liquidity providers as well,” he says. “Whether it’s the option to choose

between keeping the risk on the book or passing it on, or the option to choose between keeping a position on the balance sheet or taking it off for clearing. Banks with more options can operate more efficiently.”

Nicholas believes that pricing transparency will automatically present LPs with several opportunities. “Better pricing and a deeper understanding of when liquidity creation occurs supports more tailored products from off-the-peg algorithms to bespoke algorithmic execution,” he says. “As liquidity providers offer these, along with tools creating true cross-product fungibility such as EFPs, new market participants will be able to access OTC liquidity.”

Wu, Kuper, and Nicholas all agree that a hybrid approach to swaps trading will likely prove the most effective in the near future. “The Dealer-to-Client market is already mostly electronic, but the interbank market is still dominated by voice brokers,” Kuper notes. “Driven by the desire to seek efficiencies, better data, sophisticated technology, and the new interbank platforms, the future will be a hybrid model with e-trading taking the largest share, complemented by voice-trading as a safety net in volatile markets.”

Wu is more succinct and uses a currently popular topic to explain why hybrid is the best option. “Voice and electronic trading approaches are complementary to one other. It’s like ChatGPT – 1+1>2, the results will never be as good if you remove either the human or the AI elements,” he says.

Nicholas believes that many of the inputs to the swap market will remain human. However, the addition of machines to automate repetitive tasks will have some consequences. “The ability to auto-hedge smaller notionals and market make the most popular tenors will put the focus on larger tickets, more complex points on the curve, and less liquid pairs,” he says.

PRODUCT EVOLUTION

Electronification is marching forward in swaps, and only the future will tell where this will take us. For now, several areas in the market remain ripe for innovation. Wu mentions swap orders, CLOB trading for the interbank market, and balance sheet solutions (like flexible futures) as potential areas to watch.

Nicholas believes better pricing engines will fuel demand for liquidity, in turn creating the need for new types of execution. “This will require algorithms, APIs, smarter order types, mid-books, data analysis to highlight when and where liquidity appears, and far greater efficiency in credit management and utilisation,” he says.

“The increased complexity this suggests will require far greater levels of auto hedging of simpler flows so that traders can focus on trades carrying greater risk,” he continues. “It is likely to lead to fewer platforms, with those offering both API and GUI access, and the highest levels of functionality, technical and regulatory resilience coming to the fore, and the remainder being aggregated into bespoke UIs.”

Kuper says increased transparency will increase the need for speed, and lower latency. “Also, workflow automation will be a key focus,” he explains, “along with accessible technology designed for specific participants with complex workflows, like asset managers, to interact with a more electronic and automated FX swaps market.”