The CLS of the future will manage risk by enabling clients to more effectively manage liquidity

A financial market infrastructure founded to help banks manage cross-currency settlement risk has found that fulfilling that mandate requires change as well as continuity. According to Alan Marquard, Chief Strategy and Development Officer at CLS, the future of the organisation will always lie in the management of settlement risk, but is also evolving to address liquidity risk management, operational efficiencies, the provision of data to the market, and the needs of the buy-side. CLS sees the buy-side as one of its main areas of growth.

CLS Bank is a financial market infrastructure which launched its FX settlement service with the support of central banks in September 2002 to mitigate principal risk (often referred to as Herstatt Risk), in which one party to an FX trade pays the currency it sold but does not receive the currency it bought.

Nearly 17 years on, the CLS FX settlement service (CLSSettlement) is settling 18 of the world's most actively traded currencies during that short window in the European morning when all the real-time gross settlement systems (RTGSs) of all the currencies are open simultaneously. CLS matches settlement instructions then settles them and makes the resulting payments in a five-hour period between 07:00 CET and 12:00 CET.

Today, CLSSettlement is available both directly to settlement members, and indirectly to third-party clients that access the service via settlement members. CLS's 71 settlement members include the world's largest participants in the FX market. "Our ability to grow by only adding settlement members is somewhat limited," explains Alan Marquard. "The reason for that is settlement members can only come from jurisdictions where we have approved the currency and the enforceability profile from a legal perspective. We have the vast majority of large FX banks in nearly all those countries already."

Third parties are the principal growth opportunity for CLS

Growth opportunities lie with the 25,000 third parties - regional banks, non-bank financial institutions, corporates and fund managers – that are serviced direct settlement members. Of these, fund managers, which are already the largest group of third-party users, have proved the most important. "We continue to focus particularly on fund managers to bring them into the FX settlement system," says Marquard. "Although we have a very broad representation of the market, there is always room to grow further and we actively pursue that."

That active pursuit dates back to 2016, when CLS started to explain the benefits of its services to third parties directly – even though the organisation had no contractual relationship with third parties. "We are absolutely penetrating the fund management sector," says Marquard. "We are achieving very healthy growth through that strategy."

One aspect of the strategy is to highlight how CLS's products and services can help fund managers adhere to the FX Global Code; the set of principles and best practices published in May 2017 by a group of central banks and FX market participants concerned about the reputation of the FX industry. Buy-side adoption of the FX Global Code is a key focus for the regulatory community this year, but CLS cautions against comparisons with the sell-side.

"It is natural that sell-side signed up first, because it has senior management regimes in place already and large compliance departments that can ensure managers adhere to regulatory standards," says

Marquard. “For some of the buy-side, it is a maturity point they need to get to. Lack of speed in buy-side take-up should not be mistaken for not caring about the products they have to sell or the risks they have to mitigate.”

CLS is offering practical help to fund managers by maintaining a public register where market participants can attest their commitment to the FX Global Code. 11 out of 32 fund managers who signed the Code have done so via the CLS register. “Many of our products assist with the compliance with certain principles in the FX Global Code,” says Marquard. “During the development of new products we have ensured that they have been aligned with the principles of the FX Global Code.”

CLS is interacting directly with third-party users of its services

CLS’s relationship with third parties has traditionally been carried out via its settlement members. More recently, CLS has developed a direct relationship with these third parties. For example, its trade monitoring service (CLSTradeMonitor) allows third parties to see their matching and trade statuses directly.

“We have done a very good job of building that connectivity over the last few years and our product set is very much aimed at developing products and services that are directly useful to third parties,” he says. “But it would be wrong to think we have direct conversational connectivity to the 25,000 entities every day.”

Mitigating liquidity risk remains a key focus

Since its inception, CLS has mitigated liquidity risk in the FX market - the value to banks of the multilateral netting provided by CLSSettlement is unarguable. CLS calculates the net funding of each settlement member on a multilateral netted basis which reduces funding requirements by approximately 96 per cent. In addition it offers a liquidity management tool which reduces funding requirements by a further 3 per cent. “If CLS is settling an average of $6 trillion a day, the average actual pay-in that needs funding is only $60 billion,” explains Marquard. “The market does not have to fund the other $5.94 trillion. The market is not easily going to give up the efficiency of that to have the liquidity sitting around to fund every single trade. The liquidity savings underwrite the market every single day. If CLSSettlement went down, the thing that would have the greatest impact on the market is not the absence of payment-versus-payment (PvP) settlement. It would be the absence of the netting.”

CLS continues to see opportunities in liquidity risk mitigation, and is launching a bi-lateral, same-day, FX gross PvP settlement service this year. CLSNow, as it is dubbed, will start with US dollars, Canadian dollars, Sterling, Euros and Swiss francs. It will serve a different purpose from CLSSettlement, aimed at market participants in need of one of the five currencies immediately, rather than FX trading in the normal course of activities, for whom the principal advantage of CLSSettlement is netting rather than real-time settlement.

Marquard says “It is a liquidity management tool for participants that need funding in another currency more or less immediately.” That makes CLSNow sound like a complementary or even marginal product, but Marquard insists its impact will reverberate far beyond banks that find themselves short occasionally of large amounts of a particular currency.

"It could be wholly transformative," he says. "CLSNow will allow for real-time liquidity management. With that comes a requirement to understand your liquidity profile intra-day and to manage it accordingly. It could be very helpful, for example, in a crisis, where someone has a margin call in the wrong currency and needs to swap their home currency for something else risk-free when everybody is shutting their credit limits down. That is pretty powerful."

In fact, Marquand describes liquidity as the "new oxygen" of the FX markets. "Liquidity coverage ratios are now starting to bite. As the market speeds up and participants have to understand their liquidity positions better and manage them in real-time, there is going to be an increasing focus on liquidity optimisation. Liquidity will be a big driver of change in FX market infrastructure."

CLSNet has the potential to extend liquidity savings to non-eligible currencies

However, the liquidity-enhancing benefits of CLSSettlement's netting and CLSNow do not extend beyond pairs permitted by the 18eligible currencies. In other currencies, mismatches leading to expensive operational breaks remain commonplace. "We decided that, even if we cannot bring the other currencies directly into the settlement system for now, we would provide an alternative service that mitigates risk," says Marquard. The result is CLSNet, a netting service for FX transactions in approximately 120 currencies, including the 18 CLSSettlement-eligible currencies where they are not paired with each other.

CLSNet went live in November 2018, and currently has five participants, with three more poised to start in the near future. Because users do not have to use the service via a settlement member (in fact one of the first eight participants is not a settlement member) - CLSNet also gives CLS the potential to service directly a wider range of market participants. "We are confident that CLSNet will grow because, by bringing down the amounts that need to be settled, it mitigates settlement risk in the market and by standardizing how this matching and netting is done, it mitigates operational risk," says Marquard. "We think it is exactly the sort of thing we should be doing to help mitigate not just settlement risk, but any kind of risk we can in FX."

However, Marquard also believes that CLSNet will mature into the industry standard method of gaining the benefits of bi-lateral netting. The new service certainly has the potential to give CLS a better understanding of the flows in non-eligible currencies. This will make it easier to develop an alternative service for settling trades in currencies that are likely to remain non-eligible for the foreseeable future.

The principal obstacle to a currency's admission to CLSSettlement is the requirements laid down in the *Principles for Financial Market Infrastructures*, published in April 2012 by the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO). "It is almost impossible to bring in a country that has either a less developed legal system or geopolitical uncertainty," explains Marquard.

CLS encounters the challenges of pioneering the application of blockchain technology to FX

The CLSNet platform was built in partnership with IBM leveraging Hyperledger Fabric – an industry-accepted and open-source distributed ledger technology (DLT) solution. The logic of choosing the technology, which facilitates transactions between banks netting non-CLSSettlement eligible currencies by allocating each of them a node on a permissioned network, was clear. Practice proved more challenging.

Existing bank systems are circumscribed by multiple layers of compliance and security measures and, as a result, only a few were ready to adopt blockchain, so CLS elected to host all of the nodes itself. Even for the banks that are live on CLSNet, CLS is directing SWIFT messages into the nodes and replicating the ledger in them until such time as the banks are prepared to operate the nodes themselves.

“This is something which will be good for the market and good from the perspective of CLS and its position in the market.” He believes that CLSNet has deflated hyperbolic expectations that blockchain technology could disintermediate CLS. Beyond these defensive benefits, Marquard argues that CLSNet is building the confidence of market participants in the viability and value of blockchain technology and that the promise of DLT will one day be fulfilled. “There is a possibility that a ledger will be created on which value can simply be exchanged cross-currency and cross-asset without intermediation,” says Marquard. Though he does not see much changing in the next five years, he does think that all asset classes will one day converge on a blockchain platform. “The end-state of what this technology can do is incredibly powerful and will save the market money in terms of data integrity and conformity,” he says.

New revenue streams are being tapped in data

As it happens, access to comprehensive, high quality data is not an aspect of the FX markets which has been easy to achieve historically. The last triennial survey from the Bank for International Settlements (BIS) recorded an average daily traded value of only $5 trillion. Yet CLS, for example, reports a daily traded value of $1.6 trillion.

Marquard attributes the differences to double counting not only of the obvious (every FX transaction settles twice because two currencies are being exchanged) but of internalized trades and trades given up to FX prime brokers as well. He adds that low-volume but high-value and multi-leg currency swaps are also over-represented in the value calculations. “We think we settle just north of a 56 per cent share by value of the eligible market,” says Marquard.

It is a market share that has encouraged CLS to invest in commercial data products - as opposed to the data it already provides gratis to settlement members for reporting purposes - based on the transactions it settles. CLS started to sell market reports, which contain aggregated and anonymised volume and value statistics and trends, last year. Market participants are using it to enhance their trading strategies and support best execution, risk mitigation and reporting requirements.

“Data is now a revenue-producing business,” says Marquard. “We are bringing down the time intervals and increasing the granularity of the data.” He adds that CLS can draw on the high level of trust it has earned in the marketplace but notes that some participants are always readier than others to allow their data to be shared. For CLS, making it impossible to reverse-engineer positions in currencies with limited liquidity, or arbitrage spreads in prices, is essential to persuade members to share data.

“We are seeing very different risk appetites among users and consumers of data. We are working with market participants to analyse their data, output it and market it without ever compromising the positions or strategies of our contributors.”

It is a yet another instance of the constraints under which CLS, as a systemically important financial market infrastructure, must live. Any new products, or enhancements to existing products, must respect the overriding obligation not to put the delivery of the core service at risk. “It is a difficult system relied upon by the whole global community,” says Marquard. “Often market participants are unaware of the costs and rigour required to create and maintain resilience. Financial market infrastructures respect each other as peers operating at that level of trust.”