

Tackling rising FX settlement risk with DLT

Distributed ledger technology provides a remarkable opportunity to mitigate the rising settlement risk within the FX industry, explains Alex Knight, head of Europe, the Middle East and Africa at **Baton Systems**.

How would you characterise the extent of settlement risk in the FX industry?

ALEX KNIGHT: To put it bluntly, settlement risk is the most significant risk and control issue facing the FX market today. It has always been an area of concern, and the payment versus payment (PvP) structures set up in the early 2000s have gone a long way to mitigating many of the risks. However, data from the Bank for International Settlements shows FX settlement risk began to increase again after 2013 and that, by 2019, every day there were \$8.9 trillion of FX settlements that didn't benefit from PvP protection.

One of the challenges of the current approach is that participation is limited to major banks and some of their clients – and the range of currencies covered is restricted and hasn't increased since 2015. In addition, volumes in emerging market currencies are increasing at a rapid pace and, since many of these are not covered by the current PvP system, overall FX settlement risk is actually rising again.

Why is it such a problem and what factors restrict access to safe settlement mechanisms at an industry and individual firm level?

ALEX KNIGHT: In short, increasing settlement risk constrains FX trading activity. With banks increasingly reluctant to extend settlement risk lines to counterparties, trading activity in some currencies – notably those for which volumes are growing very rapidly and with a very large number of counterparties – is constrained. To facilitate even this constrained activity, banks and their counterparties carry real risk. To offset this risk, banks need to set aside capital. Netting down a series of trades helps reduce overall settlement exposure, although this seemingly simple solution often requires significant degrees of human intervention, which is time-consuming, expensive, not scalable and subject to error.

Beyond risk, how does the existing approach impact firms from a liquidity and operational perspective?

ALEX KNIGHT: At the heart of the current PvP settlement system is a once-a-day batch process. Although this is elegant from a netting perspective, it is suboptimal when liquidity is considered. It results in a very high concentration of payments being paid within a small window of time, with the situation further exacerbated because, for many currencies, this window coincides with very constrained availability of liquidity. The resultant payouts only occur hours later, effectively tying up limited liquidity for the duration of the process. This funding and liquidity problem carries material costs. To meet their payment obligations, firms are obliged to pre-fund their cash accounts, and funding those balances is expensive.

Until now, the only option for those transactions that are not settled through the PvP framework has been to rely on conventional bilateral settlement arrangements, which, beyond the risk itself, are asynchronous and unpredictable. Neither counterparty is obliged to pay the other at any point before cut-off time, which makes it difficult to plan funding and leads, yet again, to the need to hold big buffers to securely meet payment obligations. Netting in this instance would be the right thing to do but, in many cases, firms opt to prioritise straight-through processing and choose to settle many of their transactions on a gross basis. While operationally simple, this is not a good outcome from a risk and liquidity perspective.

How is Baton helping firms to address these challenges with Core-FX?

ALEX KNIGHT: Considering the technology that is available, the FX industry has a clear opportunity to take control. Baton has taken advantage of distributed ledger



Alex Knight

technology (DLT) to deploy a solution open to all currencies and participants that reduces the PvP settlement process to a matter of minutes. From the point netting groups are closed off to the final delivery of the

underlying currency to beneficiaries, the whole process takes about three minutes. This doesn't require the use of tokenised assets or coins.

It's so quick because we've automated every step of the collaborative workflow, including netting – which would not have been possible without the use of DLT, designed to interoperate with existing systems and processes. By using a shared permission ledger, with shared and agreed workflows, the process of continuously netting transactions is mutual and collaborative. The simultaneous change of ownership of funds in real accounts at commercial banks is enforced by a rule book, which provides the legal certainty of settlement finality.

Core-FX also allows market participants to schedule and manage the timing of the settlement process with their counterparties. By settling at different times of day, firms can avoid concentrated liquidity consumption, further assisted by the ability to split larger payment obligations into smaller shapes, using configurable rules. These new processes make it easier to plan liquidity use on an intraday basis and to monitor the settlements process in real time. In turn, it allows firms to trade without the constraint of settlement risk (and capital usage) and operational capacity, while reducing liquidity consumption and funding costs. **■**