



# Tokenised collateral goes global

In partnership with

**Digital Asset**

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# 1. Introduction

**“The collateral world is multi-asset and multi-currency. These trades have begun to evidence the potential of tokenisation across the global collateral network.**

Dan Eckstein, Virtu Financial

In 2025, a series of live repo trades were completed across the Canton network on Saturday mornings, using tokenised US Treasuries and stablecoins to provide instant liquidity outside of normal banking hours. Through the focused efforts of a number of financial institutions and technology providers, live repo transactions became a reality — opening the door to transformative gains in collateral mobility and operational efficiency across the world’s capital markets.

In December 2025, these live trades went global. In a collateral ecosystem that is cross-border by definition, the inclusion of both American and European entities and assets in a new range of weekend repo trades was a critical step in evidencing new levels of benefits and challenges from tokenisation.

This report is designed to be a showcase of what was learned by Archax, Citadel Securities, Digital Asset, DRW Cumberland, DTCC, Euroclear, Euronext Securities, Lloyds, LSEG, Société Générale, Tradeweb and TreasurySpring as a result of their live repo trades in December 2025 and January 2026. Drawing on interviews with these industry participants, this paper describes the latest insights that have been gained on the practical case for and viability of tokenised collateral in the global financial markets — across North America, the United Kingdom and the European Union.

## 2. The challenge

### What is wrong with the cross-border collateral markets today?

In our [first report](#), we highlighted the numerous challenges that exist in today's collateral markets, including the extensive manual burden for both sides of a collateral trade, the treasury costs of pre-positioning and the limited ability to react to periods of market stress.

Operational Challenges	Treasury Costs	Market Risk
Manual burden x2	Burning carry	Ineffectual decision-making
Outdated technology	Buffering	Accumulated risk
Reconciliation costs	Guesstimating for weekends	Hidden exposures to bank runs
Staff costs and exposure	Ineligibility of new funding	
Processing limitations		

In a cross-border context, all of these **challenges multiply**:

#### A. Operational challenges:

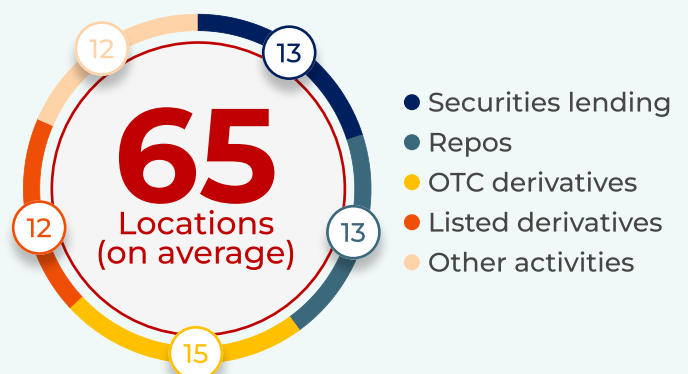
Will my collateral arrive at 65 locations on time?

Based on our latest research, 69% of firms struggle today with settlement matching and delivery issues on their collateral — owing largely to the manual processes that support these movements. Over two-thirds of the industry is unable to say for sure that their collateral will arrive at its intended destination.

In a cross-border context, this translates into high degrees of risk in moving collateral across an entire network that averages 65 collateral locations for each firm. Settlement risk is not a bilateral issue, it is a fundamental weakness that undermines an entire network of multi-national movements every day.

“Cross-border collateral means two sets of deadlines and cut offs every time — which inevitably means tighter timeframes for movements.”

#### Average number of collateral locations per firm (custody locations)





## B. The cost of corrective behaviours: Over USD 1 billion lost every night



In practice, this settlement risk translates into a series of corrective behaviours that, together, leave up to 25% of the world's collateral immobile and unremunerated.

In the face of cross-border banking cut-offs and settlement risk, firms are pre-funding 18% of their collateral obligations today — leaving billions of dollars in collateral idle overnight, simply to ensure that the margin is in place ahead of a morning deadline. In addition, cross-border payment and securities delivery risks mean that firms are over-provisioning by an additional 7%, leaving an excess of collateral in their accounts as cover.

In a market where up to USD 25 trillion in cross-border collateral is outstanding at any one time, the combined behaviours of “better early than late” and “better too much than too little” are causing more than USD 6 trillion to be left unused and uncompensated each night — at a cost of USD 1.2 billion in lost interest earnings, every night<sup>1</sup>.

## C. Weekend guesstimations: Growing in complexity

And what about the weekends? Around the world, firms today are having to project more than two days of margin obligations (or three days in the case of a public holiday) on a Friday evening, before payment and securities cut-offs make transfers impossible on a Saturday or Sunday. This established practice of “guesstimation” is a source of frustration for many, tying up valuable amounts of capital and with no opportunity for more sophisticated management.

As predictive and robo-advisory trading continues to grow, fuelling trading volumes and collateral

requirements across the 24/7 cycle, this challenge of guesstimation is growing. Where firms may previously have had little variance in their weekend funding requirements (other than mark-to-market variations), they now need to be ready for significant swings in customer- or server-driven trading — and they need to post the collateral needed to support these volumes. Predictive trading on a weekend cannot happen if it is not pre-funded on a Friday, meaning that firms are having to provision for more variance than ever on a weekend.

**“There are lots of opportunities for tokenisation to add value outside traditional trading hours—whether overnight or on the weekend. Think about wanting to trade during Asia hours before the U.S. opens when you haven't prefunded that trade, or facing an unexpected margin call and asking yourself, ‘How am I going to meet that immediately?’**

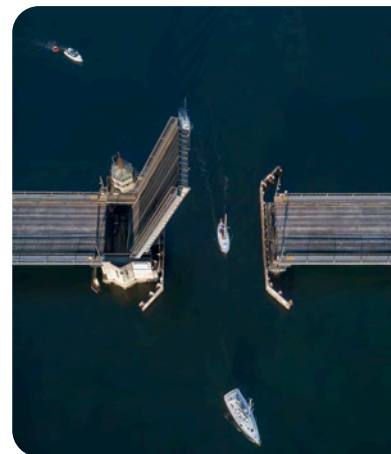
Dan Eckstein, Virtu Financial

<sup>1</sup>Assumes a 2 basis point overnight funding rate

## D. Digital cash: Making things better or worse for institutional banks?

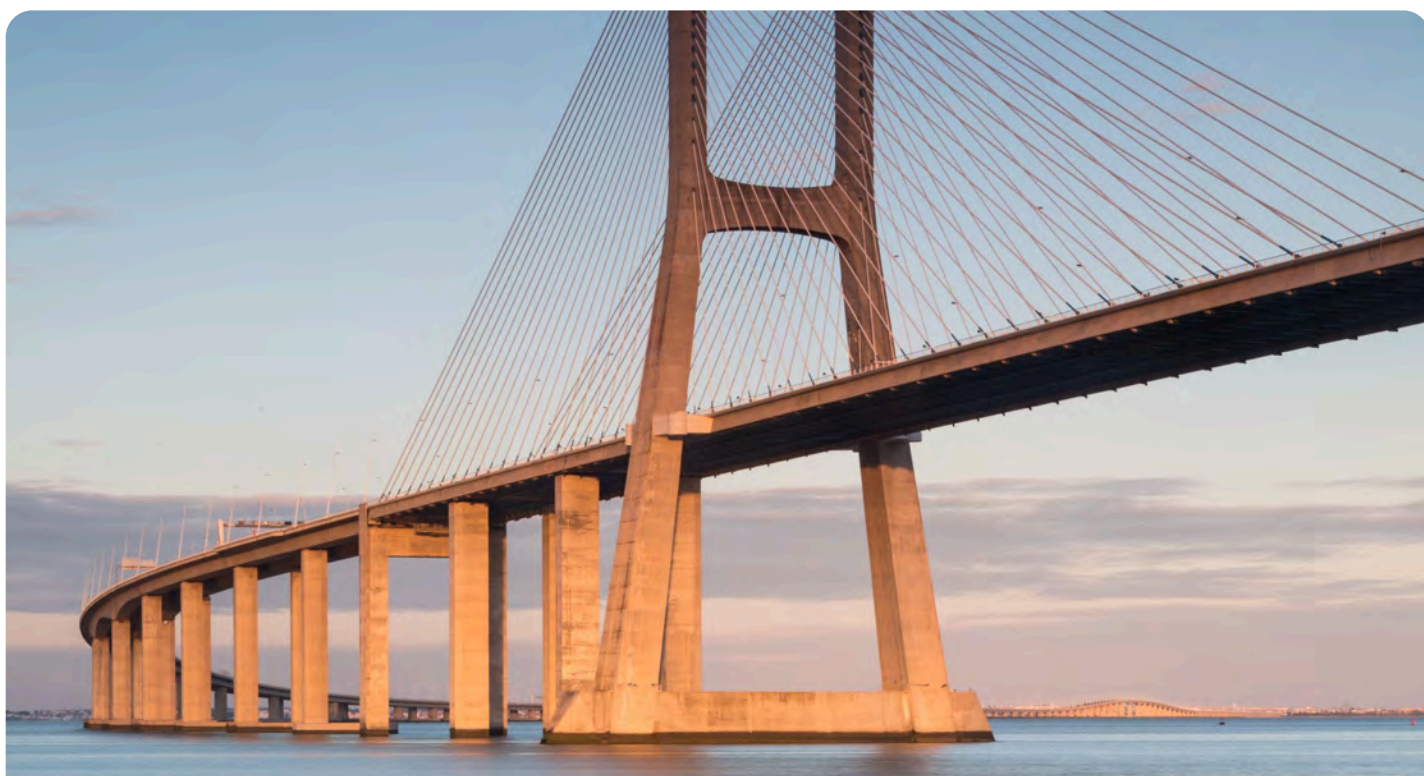
As the 2025 weekend repo trades highlighted, alternative models do exist to reduce this weekend funding burden. All of the June and September weekend repo trades were done using stablecoins (notably Circle, Brale and M1 Global's), underlining that value can be transferred today 24/7.

The challenge is that stablecoin usage can be expensive for banks today. Based on current Basel III rules (most notably the BIS' SC060 rule on Cryptoasset exposures), stablecoins can carry a Risk Weighted Asset weighting of up to 1250% (if they fail to meet a specific redemption risk test) and hence prove punitive for banks to use in large volumes. Whilst stablecoins are usable by investors and non-banks, there is today a dividing line across the industry — leaving banks with few viable options for optimising their liquidity across the 24/7 cycle.



## E. Limited scalability — means limited availability

If it is hard to move the collateral needed for repos within today's institutional ecosystem, it is impossible to do so within a broader ecosystem — putting repos and other funding solutions out of reach of smaller investors and corporates. Today, these investors are unable to access secured funding with the same levels of flexibility and are instead compelled to rely on bank credit lines for the lion's share of their treasury activity. How much could these organisations (and their banks) benefit if they were to transition to the same tools for secured funding that institutional players use every day? The potential for this transition is demonstrated by TreasurySpring's participation, as discussed further below



# 3. What just happened?

2025

2025

2026



**UST repo trades vs stablecoins**  
July 26<sup>th</sup> - Oct 18<sup>th</sup>

- Near-instant, atomic settlement
- Live cash and securities
- Regulated institutions
- On a weekend
- Re-hypothecation
- Public blockchain



**European government bonds vs UST repos**  
December 7<sup>th</sup>

- Cross-border repos (US to Europe)
- ICSD and two European CSDs
- Identical RWA treatment for digital cash legs (versus traditional cash)



**UK Gilts vs UST repos**  
January 31<sup>st</sup>

- Cross-border repos (US to UK)
- ICSD and two European CSDs
- Expanded customer reach into corporates

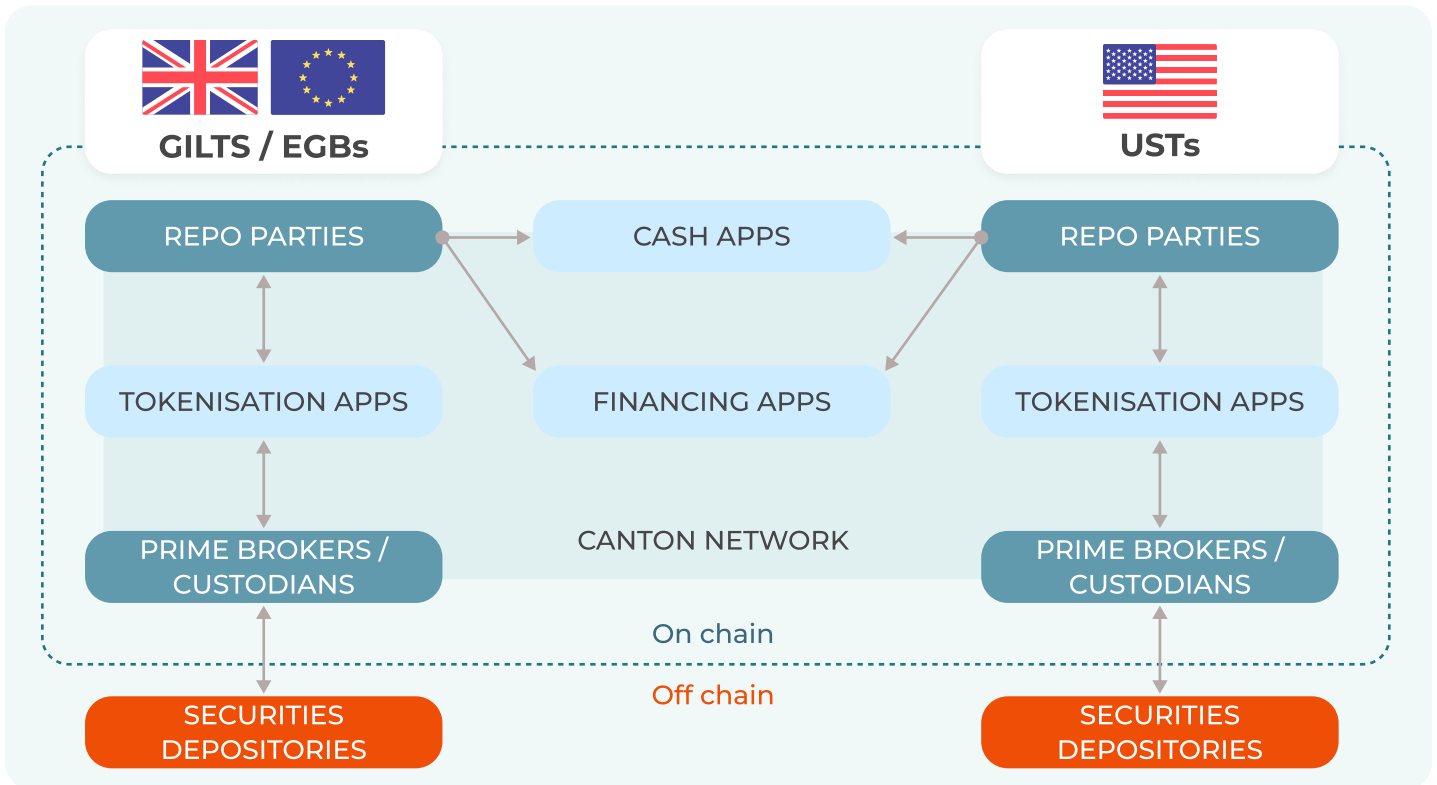


Following the completion of live repo trades in the US in Q3 2025, further rounds of live weekend repos were successfully completed in December 2025 and January 2026, involving an increasingly global range of currencies and counterparties.

“Each pilot trade has built momentum by expanding participants and trade types, starting with US Treasury versus USDC stablecoins and evolving to include Euro bonds, tokenised cash deposits, and gilts. Expanding trades to cross-border transactions has shown the platform’s potential to solve key operational inefficiencies in global collateral movement.”



Bringing together an industry team that included Archax, Citadel Securities, DRW Cumberland, DTCC, Euroclear, Euronext Securities, Lloyds, LSEG, Société Générale, Tradeweb and TreasurySpring, these trades were unique in the following additional characteristics:

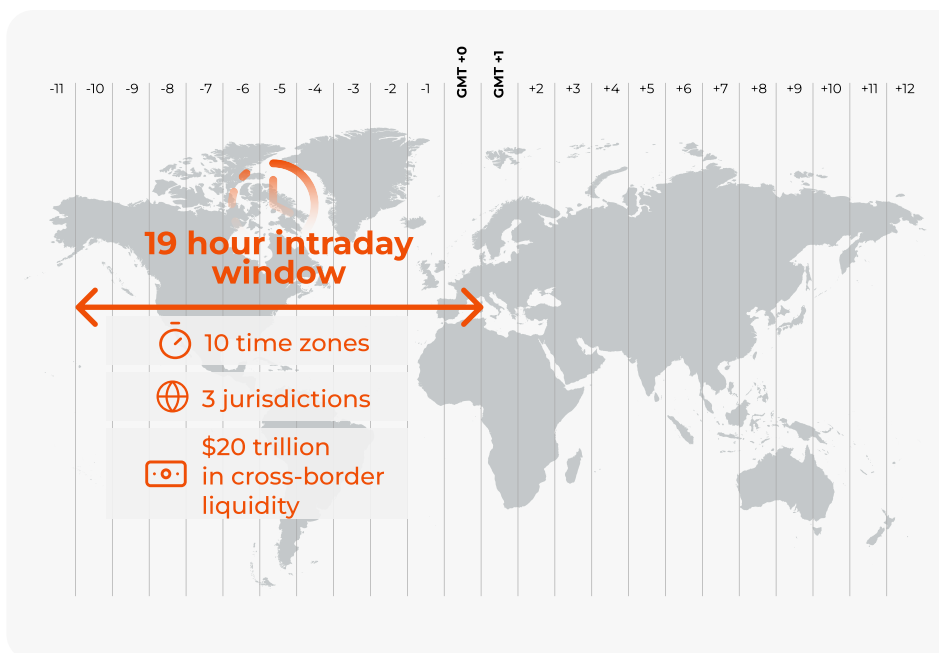


## A. Boundaryless activity for USD 20 trillion in assets

By reposing an international range of assets (including EGBs, Gilts and USTs) against a range of global currencies (including EUR, GBP and USD), these trades have proven the validity of tokenised repos in the highly complex cross-border space.

Importantly, these repo trades went beyond the traditional limitations of European securities — enabling their mobility outside the standard operating hours of the relevant CSDs and ICSD. Through tokenisation, high-quality liquid assets (HQLA) are beginning to move seamlessly between counterparties without the constraints of operating hours and settlement cut-offs.

Representing around 85% of global turnover, the three jurisdictions included in these trades span ten time zones, creating a real-time intraday collateral network that now spans the majority of the world's financial centres.



## B. Tokenised repos using European securities, by European financial market leaders



These trades were also amongst the first to demonstrate the power of instantaneous mobility for European securities across a 24/7 cycle.

By drawing on the securities inventory of Euroclear Bank and Euronext Securities (two of Europe's largest Central Securities Depositories), these trades provided a blueprint for the mobilisation of the securities held in European CSDs — and paved the way for an EUR 43 trillion increase in the supply of tokenised liquidity across the global markets.

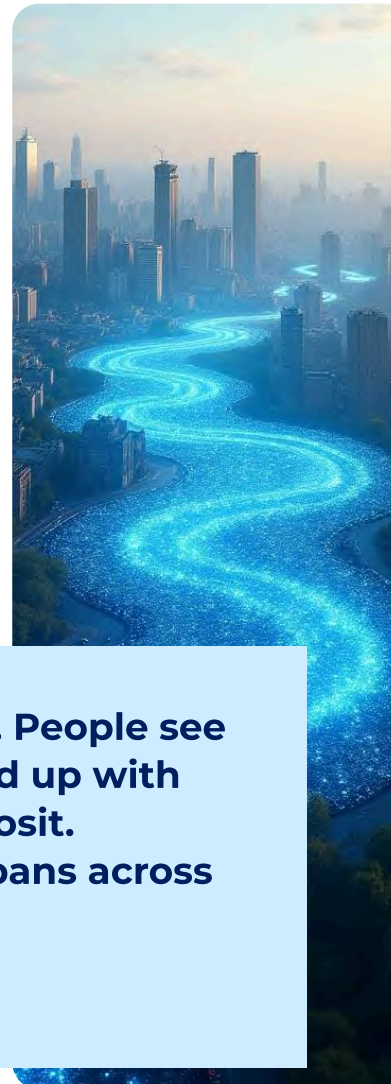
Coming at a time when the European Central Bank is beginning to accept tokens for collateral purposes<sup>2</sup>, the enablement of this supply of tokens is a critical enabler to the digitalisation of Europe's collateral markets.

## C. Evidencing the power of tokenised deposits

Whilst earlier tokenised repo trades have relied on stablecoins as the digital money leg, these latest trades introduced new choice and flexibility for counterparties — by demonstrating the institutional viability of tokenised deposits.

Counterparties in these trades were able to use an existing LSEG legal and account structure, relied on by 40+ broker dealers. This enables signees to the DiSH rulebook to pay and receive in commercial bank money at any bank LSEG has an account, even if they do not.

When compared to traditional banking, this means not only greater accessibility, but also instantaneous, frictionless liquidity. And when compared to stablecoins, this means simpler accounting. By leveraging fiat cash as their basis, tokenised deposits can most often be treated as Group 1 under the BIS's rules of crypto asset exposures and hence receive the same Risk Weighted Asset treatment as traditional cash. Instant liquidity for institutional banking, without a prohibitive balance sheet cost.



**“Tokenised deposits have a level of bank authenticity. People see them as safe. But you don't necessarily have to end up with each bank with its own siloed tokenised deposit. There is the potential for a tokenised deposit that spans across different banks.**





Simon Barnby, Archax

## 4. What does this mean for the cross-border collateral markets?

“Our objective was to answer a set of business needs — not to just deploy tokens.”






If the weekend repo trades in 2025 highlighted the significant potential of tokenisation to transform treasury efficiency at a macro level, the 2026 trades have provided new insights into how tokenisation can drive unique, new levels of balance sheet performance for all profiles of cross-border trading firms today.

### Proven benefits of tokenisation

-  **Operational efficiency**  
USD 54 million in operational savings in the US alone without sacrificing risk or income
-  **Treasury efficiency**  
120 more hours in a week
-  **New liquidity**  
More than USD 268 billion in stablecoins as collateral
-  **Collateral mobility**  
Real-time trading, margining and USD 243 trillion in new collateral



### ...in a cross-border context

-  **Cross-border payments**  
Removing the operational burden
-  **Instant cross-border payments**  
No more pre-funding
-  **Transforming today's financing**
-  **Enabling global programme-trading**
-  **Reaching new markets**



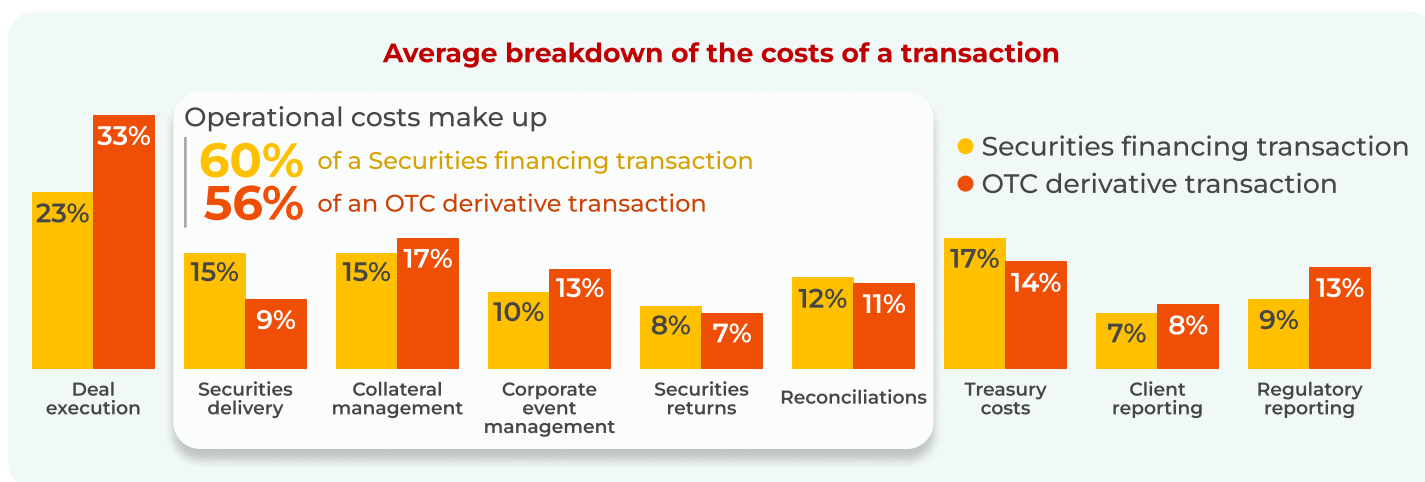


## A. Cross border payments: Removing half the cost of collateral trades

With both securities and cash tokenised on-chain, an entire universe of operational processes instantly disappears. Banking wires today are challenging to instruct and difficult to predict, driving an inescapable need for manual tracking and reconciliation at every step. “Has the payment gone? When will it arrive? Has it been received? Has it been reconciled against the corresponding securities?”

Leveraging tokenisation, these questions vanish. The movement of both cash and securities can be done instantly, with complete certainty of delivery and with zero need for reconciliations.

Given that, today, these operational costs make up over 50% of the total cost of a collateral trade, the efficiencies for counterparties are significant.



## B. Instant cross-border payments: No more pre-funding



Added to these operational inefficiencies today are the heavy toll that cross-border banking cut-offs and margin deadlines create for counterparties exchanging collateral across multiple time zones. In the face of uncertainty, US investors into European trading markets are almost certain to have to pre-fund large volumes of their activity today, creating a significant drag on the performance of their assets.

By evidencing the certainty of real-time delivery, these tokenised collateral trades have shown how fast the need for collateral to remain idle can also disappear. If trading in Europe needs to be funded in an 8:00 am margin call in Milan, a counterparty in New York can send tokenised collateral at 7:59 am, with no fear of delays or shortfalls.

If 25% of the world’s margin is currently tied up in unremunerated pre-funding or over-provisioning, these trades have demonstrated that this no longer needs to be the case between counterparties across North America and Europe.



## C. Transforming today's financing

The impacts of this certainty of real-time delivery extend beyond simply removing idle deposits.

In a market that has been built on operational inefficiencies, product and contract design has historically been limited to overnight funding (as the default) and to small amounts of intraday funding. Without settlement risk, the entire structure and design of financing can be redesigned.

For those that don't need overnight financing, intraday funding can deliver significant efficiencies in funding costs, even outside of standard operating hours. In place of overnight

repos, a European bank could trade (and program) a 3-hour or 3-minute repo against an American counterparty at 3:00 am CET for example — if their balance sheet requirements dictated it.

And for those looking to be more opportunistic, intraday repos can also mean additional returns from existing holdings (i.e. when securities can be lent for a few hours, with complete certainty of recovery at the end of the term).

In ensuring certainty of delivery, tokenisation can not only drive operational efficiency, it can facilitate a fundamental redesign of repo trading.

**“With tokenisation, the term of financing can be tied to what you need.**  
 Kelly Mathieson, Digital Asset

## D. Enabling global programme trading

Overnight and weekend trading is today capped at whatever levels of pre-funding firms choose to undertake at the end of a day or on a Friday afternoon — meaning that the traditional financial markets face an artificial ceiling on their trading volumes outside of working hours. Tokenisation can remove this ceiling by ensuring continued funding capacity on a just-in-time basis, 24/7.

As the use of predictive or algorithmic programming grows to make up around half of trading activity on the world's leading exchanges, the flexibility that tokenisation offers will become increasingly essential for performance. Today, this growth of trading overnight and on weekends can only be met by a growing volume of pre-funding (based on a set of worst-case assumptions made at the end of a day or on Friday afternoon). With tokenisation, this excess disappears and is replaced by a continued real-time delivery of margin that can rise and fall in line with trading activity. In this way, tokenisation looks set to become a core component of the 24/7 funding and trading capabilities that firms are increasingly compelled to offer today.

Region / Market	Algo Trading Penetration	HFT Penetration
US Equities	~70% – 80%	~50%
European Equities	~50% – 60%	~35% – 40%
APAC Equities	~40% – 50%	~20% – 30%

## E. Reaching new markets



As TreasurySpring demonstrated during these trades, the benefits of tokenisation can also be made available to firms in new markets including non bank, private equity and corporate firms. In executing a tokenised reverse repo using British Gilts in January 2026, TreasurySpring demonstrated that it could provide its client base (including for example private funds and corporates) with access to cost-efficient and secured funding in a way that has rarely been seen outside of the institutional markets. In place of costly bank credit, these firms can now leverage the certainty of tokenisation to derive new levels of treasury performance.

Looking ahead, these Gilt repos can easily evolve into trades based on funds units including Fixed-Term Funds or MMFs using the same technology. In these cases, holders will be able to pledge bespoke collections of assets in return for funding, thereby unlocking performance across an entire range of yield-bearing assets.

**“Our reverse repo trade was a first step in democratising this type of tokenised trade for clients who couldn’t typically access it. It’s purely additive in terms of value.**

**Kate McKay, TreasurySpring**

## 5. What did we learn?

These latest trades not only provided valuable insights into how tokenisation can deliver new levels of market efficiency. They also helped to underline the importance of a range of new critical next steps in the journey to realising these efficiencies.

**“Now is the time for fast-followers to engage. There is a functioning and live tokenisation platform in place today. Now people need to get onboard.”**

### A. Step one: Defining and evidencing the value add

**“The key has been to focus on the need that had to be fixed. To find the real value add.”**

Defining the business case is not as easy as it may seem. Those managing daily operations need to be properly briefed so that they can link today's problems with tomorrow's solutions.

Firms need to be able to come together across the ecosystem, to revise their roles and processes so that new efficiencies can become possible. Inevitably this creates insecurity and the need for compromise — and so it is critical that firms can be open to this level of structural change.

**“It's all about compromise.”**

**“The value of these trades was in demonstrating the real practical value add to our own teams and senior management.”**

Whilst external validation is important, internal colleagues are a core audience for many of these trades. Giving today's business-as-usual teams access to live tokenisation trades is a critical step in the build out of enterprise adoption.

## B. Intraday liquidity is additive

“**The effects of tokenisation are entirely additive — it’s all more income for clients.**”

Contrary to some expectations, early indications are that the creation of intraday liquidity markets is driving additional value — with relatively little cannibalisation of existing (overnight) funding behaviours. Most firms have good reasons for most of their overnight funding processes — and so intraday trading is happening in addition to this.

## C. Progress is one entity at a time

Expanding the geographical limits of collateral mobility also means expanding the entities that can use that collateral. In many cases, this has meant taking digital asset activities out of their current booking entities and moving them into new, European entities. And with each entity comes a new risk and compliance conversation — where staff have to be briefed, prepared and onboarded in order to be able to execute on-chain transactions.

“**The global collateral network isn’t just multi-asset, it’s multi-entity.**”

## D. Expediency matters

“**We don’t hold a lot of stablecoins on balance sheet but we do have cash. If the easiest thing is to move that cash then great.**”

From an institutional banking perspective, the ability to mobilise existing cash infrastructures is critically important. Tokenisation works best when it is compatible with legacy treasury systems — and so banks will inevitably avoid dealing in new forms of digital money whenever they can. Fiat is still best, for now.

From a connectivity perspective, most institutional firms will still prefer to use APIs rather than take a node on the network. Whilst this limits the sophistication of the benefits that participant banks can realise in the short term, it is an inevitable compromise — helping firms to reduce implementation risk and thereby accelerate progress.

“**Low tech is best.**”

“**These were genuine, production, live trades. The next stage is how this scales within the marketplace, within clients, and integrates with their legacy systems.**”

Simon Barnby, Archax

## E. Definitions matter

**“Would we do this for live clients now? There is still lots to be worked through and one important aspect is legal certainty.**

Kate McKay, TreasurySpring

**“What is the legal exchange of title versus the promise of title?**

Central to the question of collateral transfer is the question of exactly what is being pledged. In the case of tokenisation, the central question is whether the security itself is being pledged (i.e. that the token is the security, with no frictions or barriers to an exchange of ownership), or whether it is the promise of the security (i.e. where a 3<sup>rd</sup> party registry would need to approve the transfer of title).

A second core consideration is defining and understanding where the finality of transfer is for securities pledged as collateral. In a world of multiple collateral legs and potential claims, the irrevocability of transfers and pledges in a digital context is essential.

**“Where is finality? The devil is in the detail, but this question is front of mind for many institutional firms today.**

**“What does tokenisation mean for market conventions? Are we still using a 365 basis for rate calculations?**

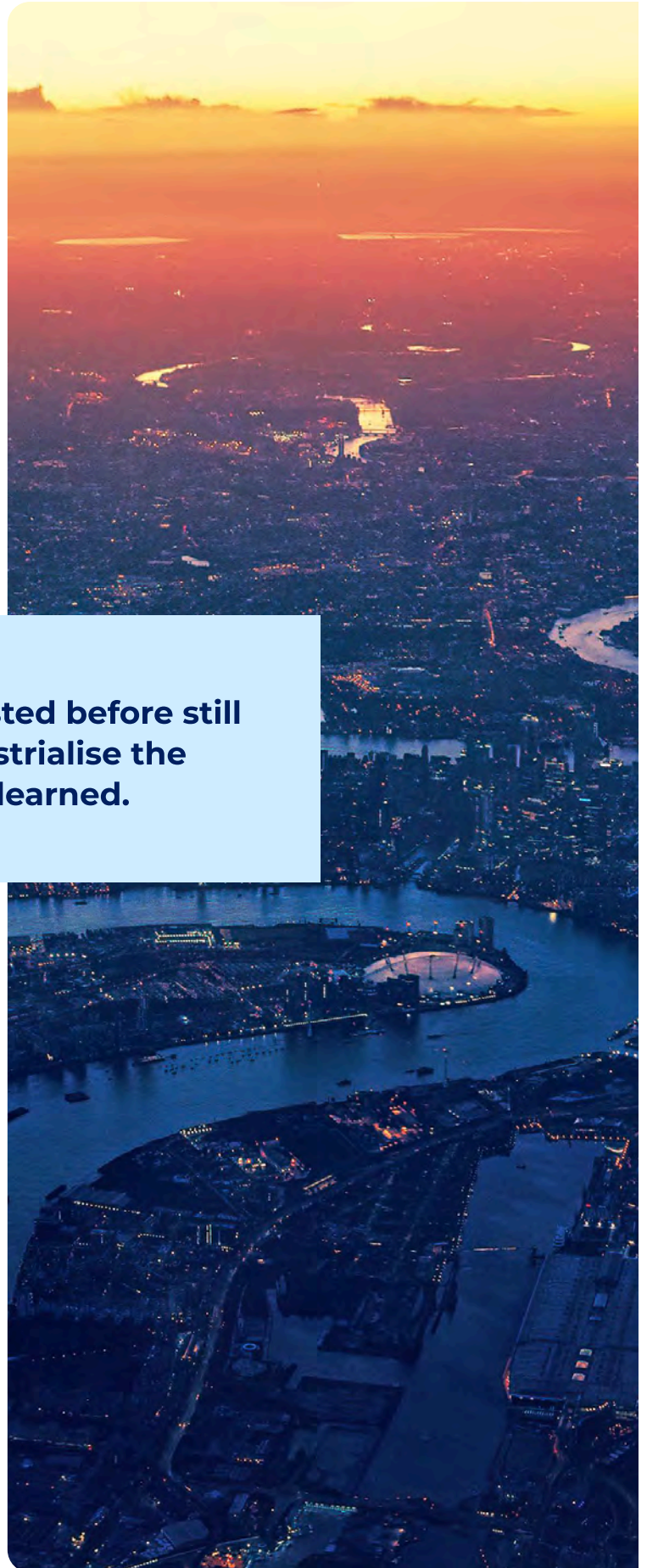
There is much to be worked out, as tokenisation calls into question long-established market rules and practices — on everything from settlement cycles to rate calculations.

**“How fast can you set up or outsource a validator node? That’s not the big challenge. Regulatory compliance is the big deal and the intense effort.**

## F. Connecting to today's collateral ecosystem

**“Can we do tokenised repos? Yes. But if this is going to scale we need the industry utilities to be part of the game too.”**

Whilst the technical viability of tokenised repos has been proven, work is still needed in order for this activity to scale. From an institutional perspective, the active participation of triparty agents is a key enabler — given their foundational role in ensuring smooth recourse to custody accounts across the globe in today's collateral markets.



**“The industry limitations that existed before still exist. The next step is to industrialise the benefits of what we have learned.”**

## 6. What lies ahead?

Today's collateral users are, together, losing USD 1.2 billion in potential earnings every night because of infrastructural challenges and settlement risk. Over the last year, the continued waves of live tokenised repo trades have provided clear evidence of how the world's treasury managers can derive significant financial benefits from the surety that blockchain can provide. As US Treasuries, UK Gilts and European Government Bonds have all been successfully tokenised (along with several forms of digital money), Canton users have not only shown what is possible, they have provided practical experience that firms across the capital markets can leverage in their own development work.

In Q3 2026, the MVP launch of the DTCC's tokenisation platform will provide even greater opportunities for firms to drive new efficiencies in their collateral processing. Working with a global community of financial institutions, collateral users will be able to safely mobilise growing volumes of their cash and securities across a vast array of international transactions and hence make the most of the billion-dollar-a-night opportunity that tokenisation now presents.



# 7. Acknowledgements



This report has been prepared by The VX (Canada) Ltd and draws on a range of statistical and qualitative inputs.

Quantitative analysis of cost structures and fees in Europe have been added to interviews of leading market practitioners who are either live or are soon to be live using a centralised platform for European settlements. The information is provided for information purposes only.

All findings contained herein have been compiled from sources believed to be reliable, but, although all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading, we make no representation that it is accurate or complete and it should not be relied upon as such. All opinions and estimates included herein constitute our judgment as at the date of this report and are subject to change without notice.

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