DTCC

Collateral Infrastructure for Tokenized Capital Markets

Just-in-Time Mobility, Capital Efficiency and Market Resilience

Developed in collaboration with FINADIUM

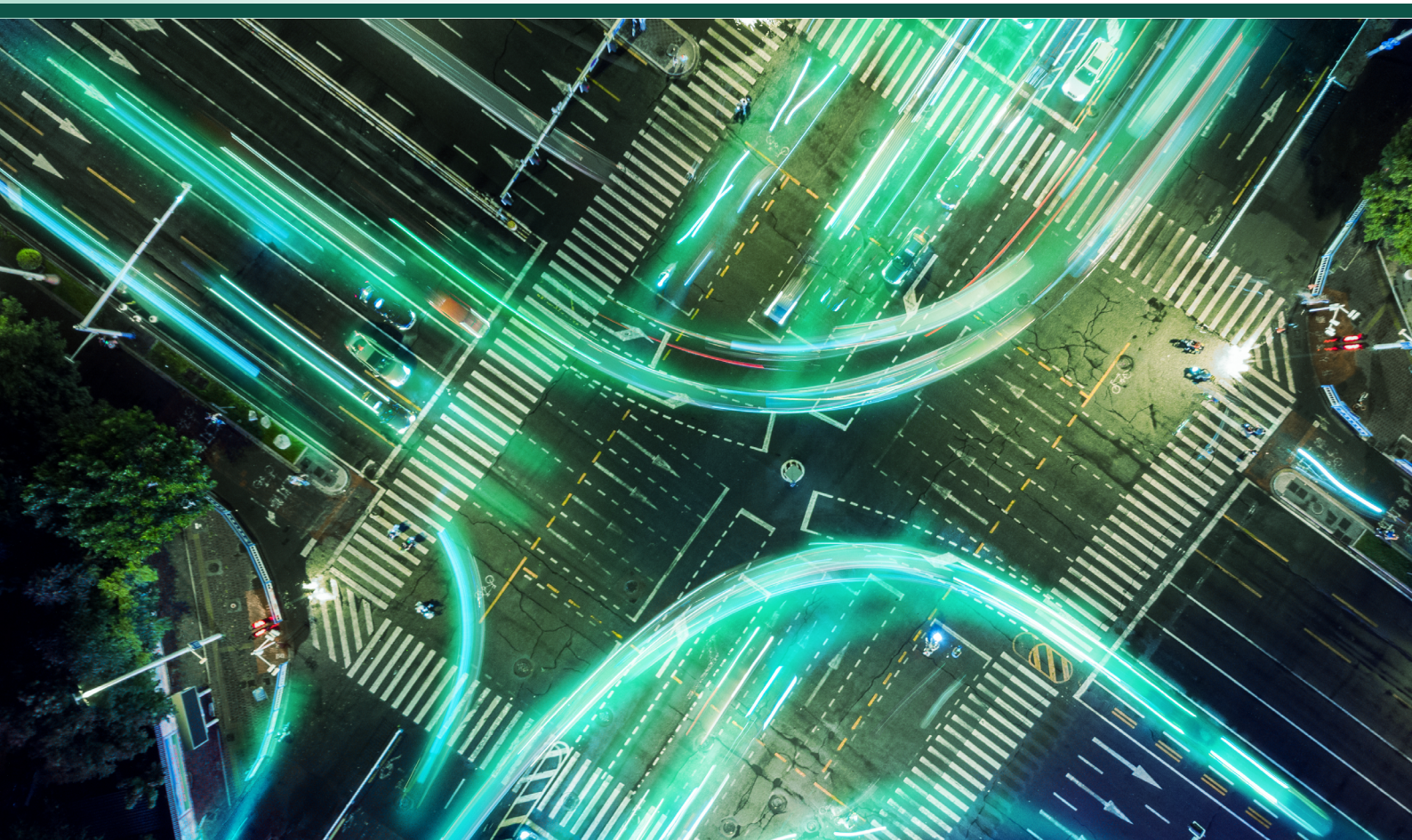


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Executive Summary

Capital markets are moving toward a more digital, real-time operating model. However, the infrastructure for moving collateral has not kept pace. As tokenized assets scale, the central issue is no longer whether assets can be digitized; it is whether they can be mobilized quickly, safely and across fragmented systems in a way that improves liquidity, reduces exposure and supports continuous market activity.

This paper argues that collateral mobility is becoming a strategic capability. DTCC's Collateral AppChain is positioned as a shared infrastructure layer that can help firms move tokenized traditional assets and digital assets more efficiently across financing, margin and settlement workflows. The goal is to shift from holding collateral "just in case" toward deploying it "just in time," improving capital efficiency while strengthening operational resilience.

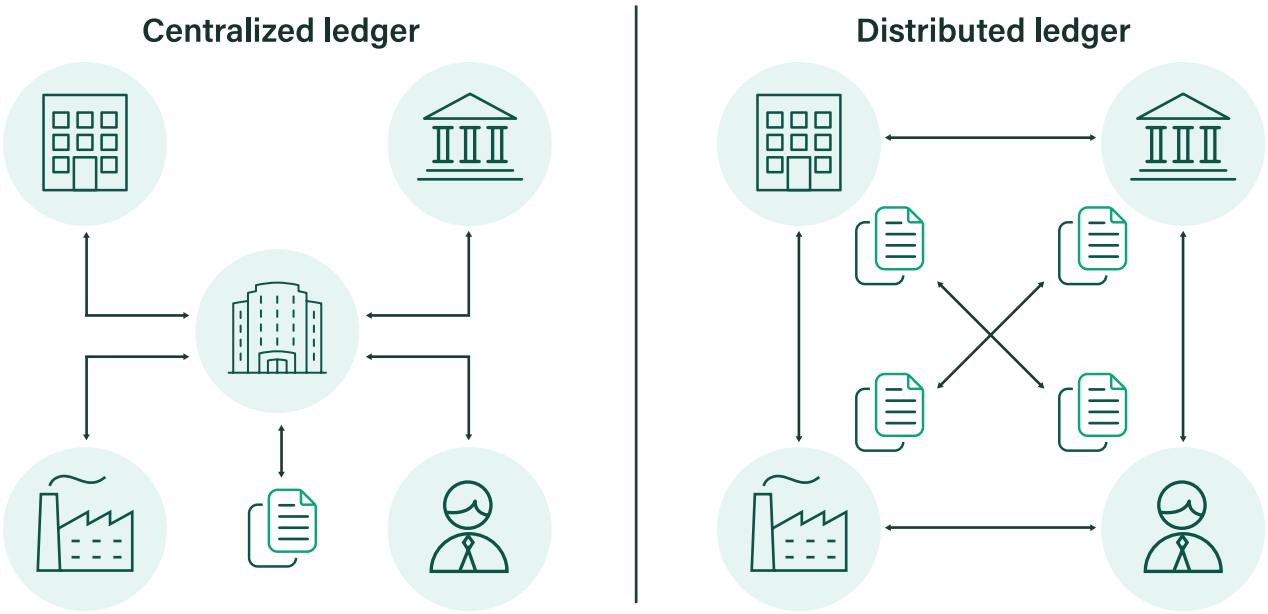
- **The near-term value is tangible.** Faster collateral movements can reduce liquidity buffers, lower funding drag, improve balance-sheet utilization and support higher-value uses, such as intraday repo.
- **Interoperability is decisive.** The benefits of tokenization depend on the ability to connect participants, asset types and infrastructures rather than creating new digital silos.
- **The business case can be quantified.** Firms can assess value through lower funding costs, reduced capital requirements, improved intraday liquidity management and potential revenue uplift from better deployment of capital.
- **The cost of delay is rising.** As markets move toward faster settlement and more programmable infrastructure, firms that wait may face a steeper transition path and weaker competitive positioning.

For senior decision-makers, the practical implication is clear: the question is no longer whether tokenized collateral matters, but where it can create measurable value first. This paper provides a framework for evaluating that opportunity, prioritizing near-term use cases and understanding why early action may produce both operational and strategic advantage.

Collateral Market Infrastructure for Tokenized Assets

Collateral AppChain is intended to serve as a shared infrastructure layer for collateral movement across participants, asset types, use cases and blockchains. Its relevance is straightforward: as markets become more digital, firms need a common way to move value, share trusted data and reduce the reconciliation, delay and operational friction embedded in today's fragmented post-trade environment. Distributed ledger technology (DLT) supports that model by giving participants simultaneous access to a common transaction record and enabling tokenized securities and cash to move on chain rather than through multiple disconnected ledgers (see Exhibit 1).

Exhibit 1:
DLT vs. centralized architecture



Source: TechTarget

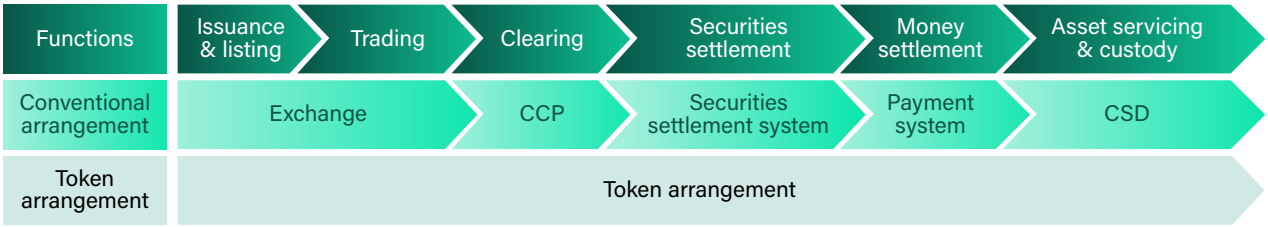
According to the Bank for International Settlements (BIS), the Global Financial Markets Association and others, use cases for DLT in capital markets include the tokenization of already-issued securities or native issuance of bonds, equities, funds, stablecoins, bank deposits, central bank money or real-world assets, such as real estate or commodities (see Exhibit 2, page 5). DLT can also be used for the trading, clearing and settlement of securities and cash, with the technology offering atomic delivery-versus-payment (DvP) on a shared ledger. Asset servicing and custody lifecycles can incorporate DLT, for example, by processing corporate actions and their associated cash flows in an automated way through smart contracts, offering potentially significant savings for what is a highly operationally intensive process.

Professionals in funding and financing believe that DLT has a role in the long-term future model for funding, financing, treasury and risk market infrastructure, according to Finadium and other surveys.[1] The current capital markets model involves multiple intermediation points that often result in manual processes and additional costs, especially when moving assets globally.

1 "Where's the DLT Tipping Point: A Finadium Survey," Finadium, April 2025, available at https://finadium.com/finadium-report-desc/wheres-the-dlt-tipping-point-a-finadium-survey/

Potential trade breaks and reconciliation of positions between counterparties also incur sizeable operational costs and manual effort. These inefficiencies and manual touch points increase risk during periods of market stress and high volumes and can be solved in part by faster and more accurate data aggregation, analysis and decision-making.

Exhibit 2:
Use case for DLT in capital markets



Sources: BIS, SIX, SNB, GFMA

The market has seen an increasing focus on tokenization and DLT in the regulated finance space in recent years. This includes:

- DTCC's announcement on receiving an SEC No-Action Letter (NAL), authorizing The Depository Trust Company (DTC), under federal securities law and regulations, to offer a new, innovative and voluntary tokenization service for DTC assets.
- The use of DLT platforms for repo trading and the tokenization of existing assets. Broadridge's Distributed Ledger Repo (DLR) saw $368 billion in average daily volumes in November 2025.[2]
- Greater issuance of tokenized bonds at scale, such as the November 2025 HKSAR and HSBC US$1.3 billion digital bond offering.[3]
- The launch of tokenized money market funds (MMFs) by J.P. Morgan, BlackRock, Franklin Templeton and Fidelity.
- Use of digital cash such as JPM Coin and Fnality to settle the cash leg of transactions on chain.

While cryptocurrencies and non-security digital assets present one use case for DLT, tokenization opportunities are growing faster than ever. According to RWA and the Association for Financial Markets in Europe (AFME), the amount of tokenized assets more than doubled in 2025 over 2024 (see Exhibit 3, page 6). There are now US$8.4 billion in tokenized assets under management, up 298% from 2024.

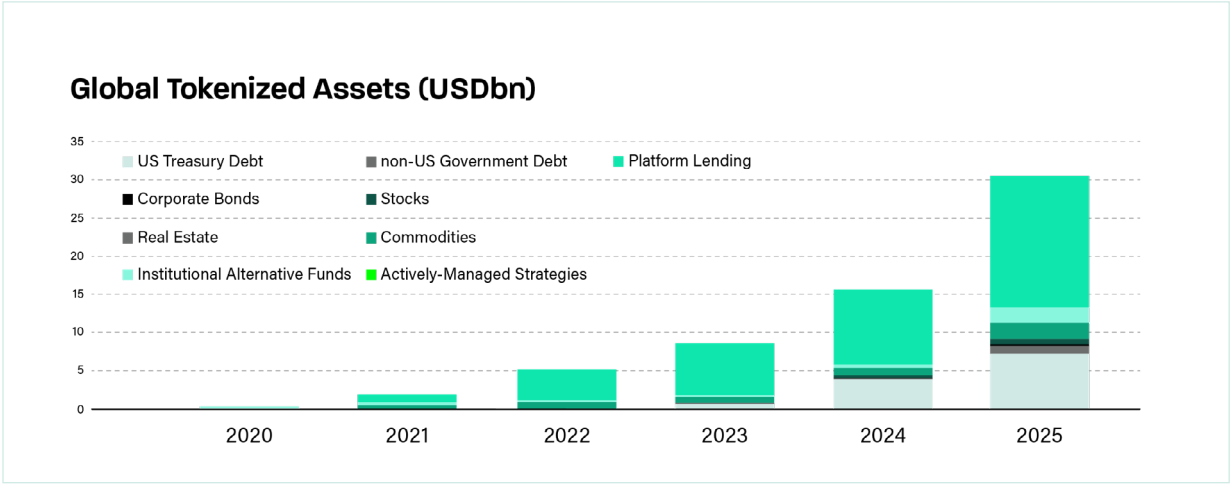
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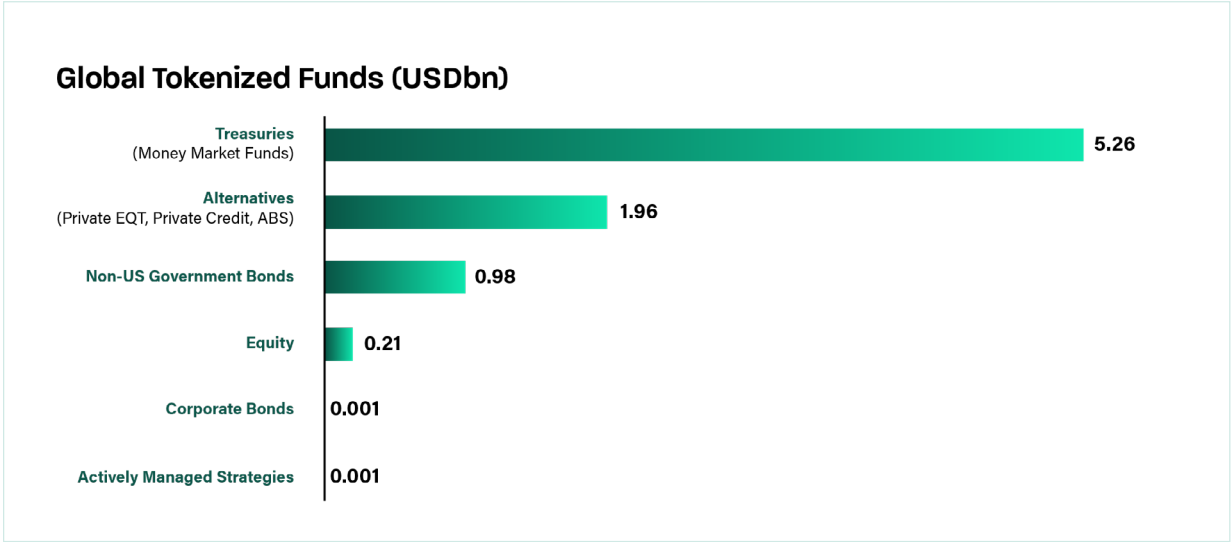
2 "Broadridge's Distributed Ledger Repo Platform Processes $368 Billion in Average Daily Trade Volumes in November," Broadridge, December 4, 2025, available at https://www.broadridge-ir.com/news/news-details/2025/Broadridges-Distributed-Ledger-Repo-Platform-Processes-368-Billion-in-Average-Daily-Trade-Volumes-in-November

3 "HSBC facilitates world's largest digital bond issuance in Hong Kong," HSBC, November 2025, available at https://www.about.hsbc.com.hk/news-and-media/hsbc-facilitates-worlds-largest-digital-bond-issuance-in-hong-kong

There are now US$8.4 billion in tokenized assets under management, up 298% from 2024.

Exhibit 3:
Growth in the value of tokenized assets





Sources: RWA.xyz, AFME

Why Tokenized Traditional Assets Matter at Scale

The strategic case for tokenized traditional assets is not just digitization; it is better financial resource optimization. If assets can move seamlessly across blockchain networks, triparty agents and central counterparties (CCPs), firms can respond faster to funding and collateral needs. But without interoperability, liquidity will remain fragmented across multiple networks, forcing each institution to consolidate data and workflows on its own. Collateral AppChain is intended to address that coordination problem.

A lack of interoperability across siloed systems and pools of liquidity makes it difficult to manage data in real time for analytics and to maintain a holistic view of risk. By enabling interoperability and providing a real-time, cross–asset class "golden source" of data, Collateral AppChain can support on-demand insights and accelerate digital transformation. Users can then deploy tokenized assets near-instantaneously via Collateral AppChain. A key enabler is greater standardization of processes and data across the digital asset lifecycle.

In the longer term, tokenized traditional assets could support the next generation of banks' financial resource optimization. They provide a digital representation of underlying assets that can align what different systems "see" across traditional securities, physical markets, off-balance-sheet transactions and more. This can unify treasury, trading, risk and client engagement around a single source of truth and improve the speed and effectiveness of decisions on capital, liquidity and funding. It can help banks shift from reactive firefighting to proactive value creation across business lines.

How Tokenization and DLT Transform Settlement and Liquidity

Tokenization and DLT can improve settlement by bringing data, asset movement and counterparty visibility closer to real time. The business consequence is lower settlement and counterparty risk, reduced capital drag, less reconciliation and faster collateral reuse. A shared source of truth also supports better operational decisions by giving firms more timely and consistent information across post-trade workflows.

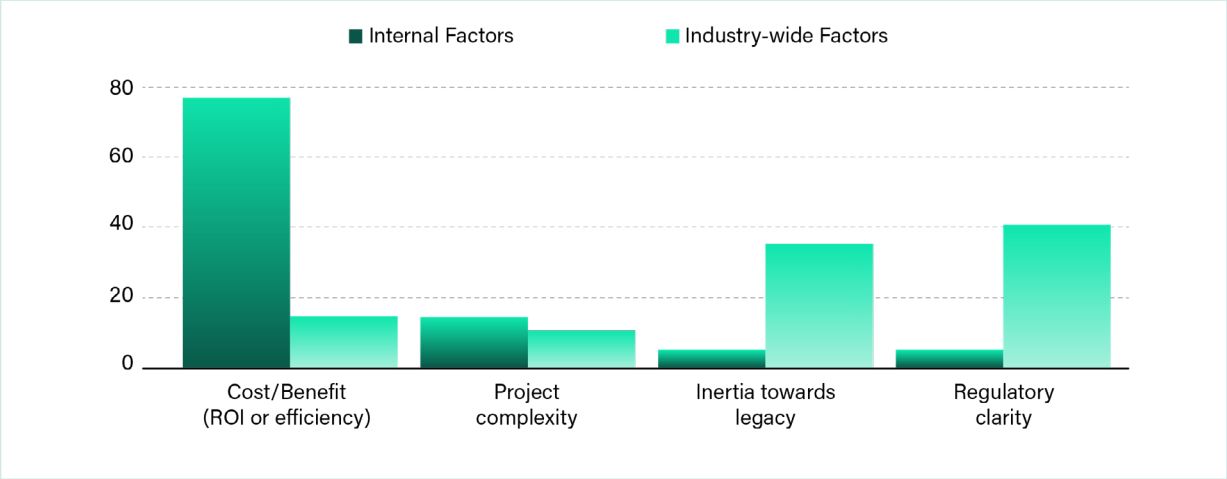
Real-time settlement could free up collateral and liquidity that banks can then use for short-term financing or cash investments, such as intraday repo transactions. CCPs deliver many of the same functionalities, but the argument for DLT is that it can work globally across cleared and bilateral markets. This represents a significant improvement over current processing.

Faster and less costly cross-border movements of cash and collateral across time zones and outside of standard trading hours mean market participants can mobilize assets in one jurisdiction to collateralize a trade in another time zone more seamlessly. In addition, DLT offers automation and programmability through smart contracts, which can automatically execute workflows through embedded logic, enabling 24/7 processing and cost savings by reducing manually intensive processing. This can reduce operational costs and supports 24/7 "always on" trading and associated collateral management.

Why Adoption Has Lagged

The market has run many DLT pilots but scaling them has been difficult because the business case has often been harder to prove than the technology. For many firms, the barrier is not belief in the long-term potential of DLT; it is the challenge of quantifying near-term value clearly enough to justify budget, operating change and parallel infrastructure costs. That is why a disciplined cost-benefit framework matters (see Exhibit 4).[4]

Exhibit 4:
Challenges to DLT adoption according to repo dealers (Percent of responses)



Source: Finadium

Factors inhibiting wider adoption include the costs and operational complexity of running existing legacy infrastructure in parallel with DLT for many years to come. Financial actors are competing for access to internal technology, legal and compliance expertise needed to make the transition. Lack of regulatory clarity and inconsistencies across jurisdictions has created complexity, although this has improved in 2025 in some jurisdictions (see Exhibit 4). Competing investment priorities, such as artificial intelligence, that have a perceived quicker time to value are taking up budget and attention. There is also a limit to how much change market participants can realistically absorb in a move to a new infrastructure.

Unlocking the full benefits of DLT requires a way to seamlessly combine the processing of movements on DLT networks across cash, collateral and derivatives. This includes the ability to carry out the cash legs of these transactions on-chain using digital money (stablecoins, central bank digital currencies or money-like instruments, such as tokenized MMFs). The market requires greater interoperability between underlying systems and blockchains processing each of these legs, from securities issuance to funding and financing, to cash settlement.

4 "Where's the DLT Tipping Point? A Finadium Survey," Finadium, April 2025, available at https://finadium.com/finadium-report-desc/wheres-the-dlt-tipping-pointa-finadium-survey/



Where Tokenized Collateral Delivers Immediate Value

Collateral mobility is the clearest near-term use case for Collateral AppChain. Today, positioning collateral can take days, increasing counterparty exposure, capital usage and the need for costly liquidity buffers. Tokenized traditional assets can improve that model by allowing collateral to move more quickly, more precisely and across platforms in a more integrated way.

Faster transfers of cash and collateral mean reduced trade exposures and lower risk. In addition, banks have to set aside liquidity buffers as they wait for collateral to be settled. DLT could free up billions of dollars in capital if trade times can be reduced from days to seconds. Banks also hold sizeable liquidity buffers to ensure margin calls can be met. These buffers could be reduced if banks could move collateral between different platforms, locations and counterparties more easily.

DLT could free up billions of dollars in capital if trade times can be reduced from days to seconds.

DLT and tokenization enable faster mobilization of collateral assets across jurisdictions and time zones at lower cost and without regard to standard trading hours. Idle collateral could be moved from a U.S. entity to meet a margin call for a firm's Japanese entity after the U.S. trading day ends. This is currently difficult to achieve.

There are potential benefits to systemic stability from DLT for collateral management. During the UK liability driven investment (LDI) crisis of 2022, pension funds had to sell assets, such as MMFs, to raise cash for margin, resulting in forced selling, operational friction, a downward spiral in asset prices and central bank intervention. If MMFs are tokenized, used as collateral and moved seamlessly on-chain, then forced liquidations to raise cash in a crisis would not be necessary.[5]

Collateral optimization on traditional rails is limited when it comes to regularly substituting assets, due to settlement costs and operational friction. The collateral mobility enabled by DLT means optimization runs can be carried out more frequently without incurring the same costs and operational risk. Real-time settlement could also free up collateral and liquidity that financial institutions can use more efficiently.

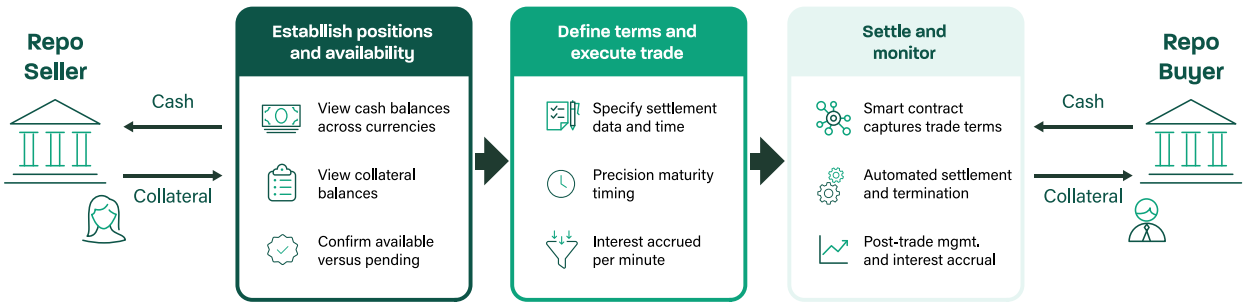
5 "Revolutionizing intraday financing with a blockchain-based solution," J.P. Morgan, 2023, available at https://www.jpmorgan.com/kinexys/documents/Kinexys-Digital-Financing_case_study.pdf

Intraday Repo: A Breakthrough Use Case for Tokenized Collateral

Intraday repo is a strong example of why collateral modernization matters. It allows firms to source liquidity with much greater precision, paying for what they need when they need it instead of carrying broader buffers through overnight repo or unsecured funding. For senior decision-makers, the appeal is simple: lower funding inefficiency, better intraday control and a clearer path to measurable savings.

Instead of using overnight repo or unsecured funding to cover intraday exposures, intraday repo allows market participants to pay for only what they need in a secured transaction. It allows financial institutions to obtain liquidity on demand on a per-minute basis, rather than overpaying (see Exhibit 5). This reduces the need for liquidity buffers and helps lower intraday overdraft fees. Intraday repo does not consume dealer balance sheet and falls outside of the U.S. Treasury Clearing mandate, avoiding margin and clearing fees.

Exhibit 5:
Example intraday repo solution workflow



Source: Finadium

While it is not necessary to use DLT to perform intraday repo, one platform provider reports that DLT adds value over traditional rails as it offers an elegant way to manage liquidity through accurate programmability and timing. This enables the velocity, transparency and security needed to make intraday repo possible. According to the product representative, "You could do intraday buy and sell before, but operationally it's very heavy, with more risk and exposure. DLT lets you manage an intraday trade in a very seamless manner."

To quantify potential savings in one scenario, daylight overdraft is floored at the Federal Reserve rate of 50 basis points (bps), and bank intermediaries typically charge an additional spread depending on the bank, service provided and creditworthiness of the borrower. This compares to intraday repo pricing in the 30-40 bps range, depending on market conditions. This means daylight overdraft costs could be cut by up to half using intraday repo and result in annualized savings in the millions of dollars for a large dealer bank. Research by J.P. Morgan suggests that intraday repo could enable a 56% decrease in operational costs when compared to traditional funding sources across settlement risk, suboptimal capital management and errors in data transmission.[6]

6 "Revolutionizing intraday financing with a blockchain-based solution," J.P. Morgan, 2023, available at https://www.jpmorgan.com/kinexys/documents/Kinexys-Digital-Financing_case_study.pdf

A BIS study found that between 2008-2018, Fedwire participants had to assign average buffers of US$630 billion daily to manage timing mismatches between incoming and outgoing payments.[7] Based on this data, a paper by JD Risk and UBS paper estimated buffers could cost around US$600 million annually for each of the top Fedwire participants, based on credit default swap (CDS) spreads.[8] For the Eurosystem, the daily average and maximum buffer values are US$443 billion and US$800 billion, suggesting similar benefits from reducing the need to hold additional cash for liquidity.

The diversification and cost reduction offered by intraday repo can allow dealers to reduce buffers and lower their average cost of funding. Lower liquidity buffers free up collateral and increase return on capital. In the longer term, the market could shift some overnight repo activity to scheduled, automated intraday trades to reduce balance sheet constraints. From a repo buyer perspective, intraday repo allows cash providers to deploy dormant liquidity and earn a return on cash that otherwise would be sitting idle. Financial institutions can therefore earn yield on cash intraday and then invest that same cash again overnight.

How Participants Can Quantify The Economic Impact

Collateral AppChain does not create value automatically; value depends on how effectively firms apply it to funding, liquidity and collateral workflows. The executive question is therefore not whether the technology is interesting, but where it can unlock capital, reduce costs or support revenue growth. This section outlines practical ways to estimate that impact.

Initial research shows that views on savings or incremental revenue gains vary widely and may depend on the role of an individual within the firm and the business mix of different banks. This section provides three possible methodologies for assessing the financial benefit of the Collateral AppChain.

1. **LCR denominator reduction.** Firms holding High-Quality Liquid Assets (HQLA) to support a targeted LCR may find natural ways to reduce LCR denominator line items by removing exposures from end of day reporting. This could result in a reduced need for the same amount of HQLA or the ability to expand client-facing repo or derivatives activity. The LCR formula is:

$$LCR = \frac{HQLA}{net\ cash\ outflow\ over\ 30\ days} \geq 100\%.$$

   Net cash outflows can be reduced by using intraday repo and the tokenized traditional asset to cover short-term liquidity needs more effectively. This can reduce wholesale funding exposures that are related to funding activities, but would not impact matched book repo business that is overnight or term. Derivatives exposure requirements for funding purposes can likewise be reduced by optimizing collateral holdings.

   In one model, applying Collateral AppChain to 15% of wholesale funding exposures using a starting LCR of 130% can reduce HQLA needs by 17%. If these were assets already held by the bank with no external funding required, then those assets could be redeployed for other purposes. If the HQLA were funded through commercial paper or other sources, it would be seen as a savings in funding cost.

The executive question is therefore not whether the technology is interesting, but where it can unlock capital, reduce costs or support revenue growth.

7 "Intraday liquidity around the world," Bank for International Settlements (BIS), April 2023, available at https://www.bis.org/publ/work1089.htm

8 "Optimising Intraday Liquidity Management," JD Risk and UBS, June 2024, available at https://jdrisk.co.uk/whitepaper-optimising-intraday-liquidity-management

2. **SA-CCR benefits.** A separate opportunity is in reducing the calculation of the bank's Advanced or Internal Model Approach alongside the Basel Standardized Approach to Counterparty Credit Risk (SA-CCR). A lower figure will directly reduce counterparty credit risk (CCR) exposure to the bank's benefit for capital flexibility.

   There are two possible ways to capture benefits in the CCR. First, in intraday repo, by not including the exposure at end of day, the Adjusted Notional for this activity may be recorded as 0 compared to the amount used for overnight repo today. Second, the maturity factor in the Projected Future Exposure (PFE) calculation could be reduced from its current value to 0.2 (the floor). This reduction of 0.1 would result in a 33% drop in the bank's SA-CCR figure when calculating against 100% RWA entities. The impact is greater for transactions where the maturity factor is greater than 0.3.

3. **Free up capital from intraday liquidity buffer.** Banks may hold 200 bps or more of capital specifically for intraday liquidity needs, as shown in annual reports and conversations with our internal capital professionals. We may also consider excess capital as a percentage of anything above 100% in the LCR. Use of the Collateral AppChain may result in a reduced need to keep this cash on reserve. In the case of banks that rely on market funding, a reduction in an initial 15% of funding will yield direct savings in financing costs. Conversely, we may choose to keep sourcing this funding but will be freed up to re-lend this capital to clients at our current spread.

Investment vs. Revenue Growth – A Scenario Analysis

It is expected that there will be a three- to six-month project timeline for a participant to implement Collateral AppChain, after which participants will begin small tests to validate use cases. In year one, assuming six months with a 2% conversion of a buffer and PFE to digital and intraday, it may be possible to free up US$150 million in capital and generate US$9 million in incremental bank-wide revenues through more efficient capital deployment.
A US$40 million incremental savings/revenue benefit by years two or three would be realistic to consider. By year four, cumulative project revenue would reach US$114 million.

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By year three, assuming 25% of the business is on Collateral AppChain, it is possible to see benefits of US$1.9 billion in freed-up capital and US$225 million in incremental revenue. After year three it is uncertain how much further adoption can go; this will depend on industry utilization of digital platforms and the network effect more than any individual firm's own readiness for adoption.



The Cost of Inaction

Momentum behind DLT-based market infrastructure is increasing. Growth in digital bond issuance, stablecoin usage, tokenized deposits and work toward faster settlement all point in the same direction: capital markets are moving toward more real-time, programmable and interoperable operating models. As that shift continues, the strategic risk of waiting increases.

The cost-benefit analysis for adopting the tokenized traditional asset methodology as presented by Collateral AppChain now rather than further down the line is compelling to maintain market leadership. Although DLT can be more complex to connect to and set up, not making DLT investments now could be a disservice that would forestall what is currently seen as an inevitable conclusion by market participants.

There are data management benefits for both banking institutions and the industry as a whole. The current fragmented state of transaction data across CCP, bilateral non-triparty with settlement through market infrastructure platforms, bilateral triparty and bilateral self-settled, means that there is no single true source of data in the market; each electronic execution venue and dealer has its own set of transactions that may be considered the best and final for its purposes, but not for a counterparty's. Tokenized markets run on DLT rails could help end any question about the size, scope and trade details of transactions.

Interoperability is a key consideration. Moving a tokenized security from Account A at one Financial Market Infrastructure (FMI) and transferring to another account at the same FMI has little benefit. But there is more value when tokenized collateral can cover triparty exposures at other agents without moving collateral. A proliferation of DLT platforms leads to a need to view activity across these platforms in one place and the ability to execute cross-chain transactions from a single portal, something that DTCC is well positioned to support.

Regulators and central banks are supportive of DLT as the long-term market infrastructure. The Organization for Economic Co-operation and Development said in January 2025 that the benefits "include efficiency gains driven by automation and disintermediation, and associated cost and speed enhancements; transparency; fractionalization; improved liquidity potential and tradability of assets with near-absent liquidity; faster and potentially more efficient clearing and settlement; as well as programmability at the post-trade level and beyond,

and associated streamlining of cross-border funds or information flows, enabling "always on" transactions not bound by business hours."[9]

In 2024, the BIS outlined its vision for the future financial system through the concept of the "Finternet": multiple financial ecosystems interconnected with each other – much like the internet.[10] Unified ledgers and tokenization are important building blocks of the Finternet. According to the BIS, "Unified ledgers are digital platforms that bring together multiple financial asset markets, such as for wholesale tokenized central bank money, tokenized commercial bank deposits and other tokenized assets, including company shares, corporate or government bonds and real estate, to name just a few, as executable objects on common programmable platforms." This Finternet appears highly synonymous with Collateral AppChain.

The current U.S. administration has expressed a strong desire to increase competition in capital markets by allowing crypto-native firms, such as Coinbase, Circle and Ripple, to engage in similar activities to regulated financial institutions with the possible threat of disintermediating current market leaders. Crypto-native firms are lobbying the SEC to allow them to use DLT to issue, trade and settle securities, expanding the range of tokenized equities opportunities in the U.S. They are further asking regulators to approve the integration of brokerage, exchange, custody and clearing under one entity, rather than using multiple intermediaries and making vertical integration plays through acquisitions.[11]

The SEC and CFTC are more crypto-friendly than ever and are taking an innovation first approach. For example, regulators are considering exemptive relief for crypto-native firms and access to skinny Federal Reserve master accounts.[12] The regulated financial services industry is pushing back, however. For example, in a recent letter to the SEC, Citadel Securities requested that the agency should not exempt DeFi protocols from being regulated as an "exchange" and "broker-dealer."[13]

Implementing Collateral AppChain now could significantly accelerate capital and liquidity optimization efforts. Tokenized traditional assets represent the next phase of financial resource optimization that many financial institutions are expected to pursue over time. First movers may see material advantages in cost of capital management, enabling more competitive client pricing, improved capital allocation and increased profitability.

9 "Tokenisation of assets and distributed ledger technologies in financial markets," OECD, January, 2025, available at https://www.oecd.org/en/publications/tokenisation-of-assets-and-distributed-ledger-technologies-in-financial-markets_40e7f217-en.html

10 "BIS: what a "finternet" could look like with unified ledgers," Finadium, April 2024, available at: https://finadium.com/bis-what-a-finternet-could-look-like-with-unified-ledgers/

11 "Competition heats up in corporate treasury repo as Ripple enters the fray," Finadium, October 2025, available at https://finadium.com/competition-heats-up-in-corporate-treasury-repo-as-ripple-enters-the-fray/

12 "Big questions on bank disintermediation as Fed mulls master accounts for stablecoin issuers," Finadium, November 2025, available at https://finadium.com/how-worried-should-banks-be-about-fed-master-account-access-for-stablecoin-issuers/

13 "Citadel asks SEC to regulate DeFi protocols as exchanges, sparking backlash," The Block, December 2025, available at https://www.theblock.co/post/381306/citadel-sec-defi-backlash, https://www.theblock.co/post/381306/citadel-sec-defi-backlash



Key Insights

- **The bottleneck is no longer token creation; it is collateral mobility.** As digital assets scale, competitive advantage will depend on how quickly firms can move collateral across markets, jurisdictions and platforms without adding risk or fragmentation.
- **"Just-in-time" collateral can improve capital efficiency in measurable ways.** Faster and more targeted collateral movements can reduce liquidity buffers, lower funding drag and improve optimization across LCR, SA-CCR and intraday liquidity management.
- **Interoperability is what turns technical progress into economic value.** DLT can deliver real benefits, but only if firms can coordinate cash, collateral, derivatives and post-trade workflows across multiple infrastructures and ledgers.
- **Intraday repo is the clearest near-term proof point.** Programmable, time-sensitive collateral movement makes minute-by-minute liquidity management more practical and can reduce funding cost, idle balances and operational friction.
- **Delay creates strategic as well as operational cost.** As markets move toward faster settlement and more unified digital infrastructure, firms that wait may face a steeper transition curve and weaker competitive positioning.

Appendix

DTCC's Collateral AppChain Product Overview and Benefits

Collateral AppChain provides a single solution, with the aim being to move any value in any jurisdiction on a 24/7 basis, through unified rails. This supports the financing of real-world and natively digital assets with various types of collateral, using tokenized assets and smart contracts and enables the real-time movement of collateral, globally.

Collateral AppChain offers a set of capabilities with features to support dynamic pricing, eligibility, haircuts, interest rates, compliance and data management. This enables transactional activity to be optimized for privacy and performance. Collateral AppChain will be integrated with TradFi market infrastructure in order to enable mobilization of traditional assets and cross the bridge between natively digital, tokenized and traditional assets.

One of the most compelling features of the Collateral AppChain is the net asset pool, with the ability to view assets and exposures across markets, counterparties and other market infrastructures. Market participants now have the potential to view all collateral obligations and positions across agreements, CCPs and triparty agents in one place as well as having a view on the assets available to post as collateral. Collateral AppChain provides collateral management workflow centered around the daily activities of a collateral trader.

Uses of Collateral AppChain include moving assets in one jurisdiction to another after market close to create a truly global liquidity pool; enabling interoperability between multiple DLT networks such as Hyperledger Besu and Ethereum; and allowing financial entities to optimize and move collateral between multiple triparty agents and CCPs, creating a multiple-triparty optimization process while keeping the existing triparty RQV process. This interoperability is one of Collateral AppChain's key differentiators. Concurrently, a DTCC LedgerScan application consolidates on-chain and off-chain activity, enriches it with real-time pricing and KYC information, and tracks wallet activity across chains to create a single view of positions and risk.

Real-time recall and near real-time collateral movements mean financial firms can allocate excess collateral to the right place at the right time with no restrictions on settlement windows, regions or product silos. This allows users to reduce the collateral buffers needed to mitigate against the inefficiencies of current architecture and enhances collateral optimization algorithms, leading to lower collateral and funding costs.

As the market evolves, Collateral AppChain will help market participants to make use of assets such as tokenized MMFs and other assets unlocked for use as collateral through the developments in tokenization. It will also provide the ability to make changes to collateral eligibility schedules quickly and easily to expand the range of eligible assets during market stress. This may include the use of more volatile asset classes like cryptocurrencies as collateral through more real-time margining and collateral management versus traditional processes, should regulation support this in the future.



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