Crave MANAGEMENT

MAJOR PROJECTS · TOKENISED CAPITAL

WHITEPAPER

The Tokenisation of Real-World Assets.

Benefits, risks, and regulatory realities for institutional allocators. Prepared for institutional investors and family offices.

JUNE 2026

IMPORTANT NOTICE

This document is provided for informational and educational purposes only. It does not constitute investment, legal, tax, or accounting advice, and it does not constitute an offer or solicitation to buy, sell, or hold any security, digital asset, or other financial instrument.

Tokenised real-world assets are subject to legal, regulatory, technological, operational, and counterparty risks. The regulatory treatment of these instruments varies materially by jurisdiction and continues to evolve. Investors should obtain independent professional advice before making any allocation decision.

Market data, platform descriptions, and regulatory positions cited in this paper reflect the state of the market as of mid-2026 and should be independently verified. All references to specific platforms, issuers, custodians, and protocols are illustrative. Inclusion does not constitute endorsement. Exclusion does not constitute criticism.

CONTENTS

WHITEPAPER

Executive Summary

The tokenisation of real-world assets has moved from concept to capital-markets reality. The question for allocators is no longer whether to engage. It is how to assess the exposure honestly.

By mid-2026, on-chain tokenised RWA assets under management exceeded USD 20 billion. BlackRock, Franklin Templeton, JPMorgan, VanEck, and BNY Mellon all run live products. ERC-3643, the leading compliance-embedded token standard, counts DTCC, Fireblocks, Deloitte, Chainlink Labs, Ava Labs, and OpenZeppelin among its institutional members.

A token is not an asset. It is a claim on an asset.

The integrity of that claim depends on the integrity of the wrapper — the legal structure, the custodian, the transfer agent, the smart contract, the oracle, and the dispute mechanism. The order in which these are assessed determines the quality of the allocation decision.

Central position

Tokenisation is a wrapper innovation, not an asset innovation. It rarely creates a new asset class. It creates a new way of holding, transferring, and settling claims on existing assets. For allocators with strong operational due diligence, the wrapper offers meaningful gains in settlement efficiency, programmability, and composability with on-chain liquidity venues. For allocators without that capability, it can add opacity disguised as transparency.

What this paper covers

- What tokenisation actually changes — and what it does not.
- Where the genuine efficiency gains lie — and where the marketing overstates the case.
- What the new risk surface looks like — and where it overlaps with risks investors already understand from securitisation, structured products, and private placements.
- How the regulatory landscape is settling — and how the patchwork shapes which products and jurisdictions are viable.
- A practical framework for institutional due diligence.

Headline conclusions

Genuine gains exist. Atomic settlement, programmable distributions, and composability with on-chain liquidity are real. They matter most for repeatable issuance at scale.

> **COUNTERPARTY RISK DOES NOT DISAPPEAR. IT MIGRATES.**
>
> The issuer, the custodian, the transfer agent, the smart contract administrator, and the oracle provider each represent a counterparty layer. Several of these layers did not exist in traditional securitisation.

Governance rights are counterparty risk. Any token with an upgradeable contract, a freeze function, or a privileged administrator role carries an embedded permission that the issuer or a designated agent can exercise. This is not a flaw. It is a feature most institutional products require for regulatory compliance. But it must be priced as exposure.

Regulatory clarity is uneven but improving. The EU under MiCA and the DLT Pilot Regime, Singapore under MAS, and Hong Kong under the SFC offer workable frameworks. The United States remains a patchwork until and unless the CLARITY Act and accompanying SEC and CFTC rule-making produce a settled position.

The relevant comparison is not crypto versus traditional finance. It is one structured wrapper versus another. The honest comparison is to private placements, securitisation, and ETFs — instruments whose risks institutional investors already understand.

SECTION 01

The Landscape: What Has Actually Changed

Tokenisation is not new. The concept of representing ownership of an off-chain asset via an on-chain token has existed since 2017. What is new is institutional adoption at meaningful scale.

Through 2024 and 2025, three things converged.

First, regulatory clarity arrived in select jurisdictions. Singapore under the Monetary Authority's Project Guardian, Hong Kong under the SFC, and the European Union under MiCA and the DLT Pilot Regime each established workable frameworks for tokenised securities. The United States moved more slowly but produced enough guidance for issuance under Reg D, Reg S, and Reg A+ to proceed with reasonable certainty.

Second, the infrastructure matured. Compliance-embedded token standards, regulated custodians, audited transfer agents, and proof-of-reserve oracles converged into a workable stack. The ERC-3643 standard, supported by an institutional association of seventy-eight members including DTCC, Deloitte, and Chainlink Labs, became the reference standard for permissioned security tokens.

Third, traditional institutions stopped piloting and started shipping. BlackRock launched BUIDL in March 2024, tokenising a US Treasury-backed money market fund via Securitize on Ethereum. It crossed half a billion dollars in AUM within six months. Franklin Templeton's BENJI, live since 2021, expanded to multiple chains. JPMorgan's Kinexys settled tokenised Treasury transfers atomically with payment rails in 2025. VanEck launched VBILL through Securitize the same year. Centrifuge, Maple, and Goldfinch routed billions through private credit pools.

Composition of the market

By May 2026, total tokenised RWA AUM exceeded USD 20 billion. The composition is heavily skewed.

- Short-duration sovereign debt — primarily tokenised US Treasury and money market exposure — accounts for the majority of AUM.
- Private credit, structured through SPV-backed pools, is the second-largest category.
- Tokenised equities, real estate, commodities, and intellectual property each make up smaller but growing shares.

The skew matters. The tokenised RWA market is, in dollar-weighted terms, predominantly a market for short-dated, high-quality, regulated income products. It is not, in volume terms, a market for fractionalised real estate or alternative assets. The marketing emphasis on alternative asset classes has not yet translated into commensurate AUM.

Three patterns now clear

Pattern one — institutional volume sits in regulated wrappers

The bulk of tokenised RWA assets are held in Reg D, Reg S, or Alternative Investment Fund structures, accessible only to accredited or professional investors. The democratisation narrative is largely a retail-facing story. The institutional reality is gated.

Pattern two — compliance lives at the token layer

ERC-3643 and equivalent standards embed whitelist gating, transfer restrictions, and identity verification into the token itself. Most institutional RWA tokens are categorically different from bearer instruments. They are programmable claims that respect off-chain regulatory constraints. A wallet that has not completed identity verification cannot hold the token. A wallet that has been added to a sanctions list can be blocked from transferring it.

This is the central design choice that made institutional adoption possible. It is also the central feature that critics describe as recreating the existing financial system on a slower set of rails. Both descriptions are correct. The trade-off is explicit.

Pattern three — the market is consolidating

Six platforms route most tokenised RWA volume.

- Securitize — transfer agent and issuer of record, used by BlackRock and VanEck.
- Ondo Finance — tokenised fund manager and chain operator.
- Backed Finance — wrapped-equity factory under Swiss FINMA oversight.
- Centrifuge — private credit marketplace with EU AIFM-compliant structuring.
- Hashnote — institutional money market issuer.
- Plume Network — purpose-built RWA settlement chain.

Concentration matters. Counterparty risk concentrates at a small number of issuers, custodians, and transfer agents. Platform failure or regulatory action against any one of them would propagate quickly through the dependent product set.

The shift in language

Through 2022 and 2023, conversations about tokenisation were dominated by terms like disintermediation, trustless, and permissionless. Those terms have largely disappeared from institutional product literature. The vocabulary has shifted to regulated, compliant, permissioned, and transfer-restricted.

This is not a contradiction of the original blockchain thesis. It is recognition that institutional capital requires identifiable counterparties, enforceable claims, and regulatory permissioning. The tokenisation that scaled is the tokenisation that accepted these constraints.

The question for allocators: what does tokenisation deliver that existing wrappers do not? The honest answer is settlement efficiency, programmability, and composability with on-chain liquidity. Everything else — democratisation, twenty-four-hour trading, lower costs, transparency — is either marginal, conditional, or overstated. Each is examined in section three.

SECTION 02

The Mechanics: Wrappers, Standards, and Architecture

A token is not an asset. It is a digital representation of a claim on an asset. The integrity of the claim depends on the architecture surrounding it.

This section walks through that architecture. It is unavoidably technical in places, but the framework is straightforward. Tokenisation involves four layers — the legal wrapper, the token standard, the compliance architecture, and the off-chain attestation infrastructure. Each layer introduces choices and trade-offs. Each is a place where deals fail.

Layer one — the legal wrapper

Tokens cannot, in most jurisdictions, directly represent legal ownership of a physical asset. A token cannot hold the deed to a building. The deed must be held by a legal entity, and the token must represent a claim against that entity. Three structures dominate.

Special Purpose Vehicle

The most common structure. A private limited company or trust is formed to hold the underlying asset. The SPV issues equity, debt, or beneficial interests. The tokens represent fractional ownership of those interests. Investors hold tokens. The SPV holds the asset. **Advantages** — well understood, jurisdictionally portable, accepted by most regulators, integrates cleanly with custodian and transfer agent workflows. **Risks** — bankruptcy remoteness depends on jurisdiction and structuring quality. Token holders are creditors of the SPV, not direct owners of the underlying asset.

Trust structures

A trust holds the asset. Tokens represent beneficial interests. Often used for real estate, fund interests, and royalty streams. Common in jurisdictions with developed trust law — Jersey, Guernsey, the Cayman Islands, Singapore. **Advantages** — strong beneficial-ownership recognition, mature legal precedent, often more bankruptcy-remote than SPV structures depending on jurisdiction. **Risks** — trust law is less harmonised internationally than corporate law. Recognition of token-based beneficial interests in foreign courts is still developing.

Direct tokenisation

The token is the legal instrument. The most ambitious approach. Currently viable only in narrow categories — certain bond issuances under the EU DLT Pilot Regime, specific digital securities under Singapore and Liechtenstein law, and equity issuances in a handful of cooperative jurisdictions. **Advantages** — eliminates the wrapper layer entirely; the token holder is the legal owner. **Risks** — jurisdictional reach is limited. Many investor types and custodians cannot yet hold direct tokenised securities, and secondary market venues that recognise direct tokens are scarce.

Layer two — the token standard

Token standards define what the token can do, who can hold it, and what controls the issuer retains.

ERC-20

The base fungible token standard on Ethereum and EVM chains. Used for early-stage tokenisation and for assets that do not require investor restrictions. Lacks built-in compliance functionality. Inappropriate for regulated securities without supplemental contracts.

ERC-1400 and ERC-1404

Early security token standards. ERC-1400 introduced partitioned tokens and transfer restrictions; ERC-1404 added a simple restriction framework. Both saw limited adoption and are largely superseded.

ERC-3643

The current institutional standard. Embeds identity verification, whitelisting, transfer restrictions, and recovery mechanisms into the token itself. Allows the issuer or a designated agent to enforce regulatory compliance at the token level — block transfers to non-verified wallets, freeze assets of sanctioned holders, recover tokens from lost or compromised wallets. Supported by an association of seventy-eight institutional members. Used in the majority of large institutional RWA issuances on EVM chains.

Token-2022 on Solana, and equivalent designs

Non-EVM ecosystems have developed parallel standards. Solana's Token-2022 program uses transfer hooks that fire on every transfer and execute custom compliance logic. Stellar implements compliance at the network layer, with accounts locked by default and activated only after KYC clearance. These are architecturally different from ERC-3643 but functionally equivalent in their compliance posture.

Layer three — the compliance architecture

The combination of legal wrapper and token standard determines the compliance posture. Three approaches dominate.

Whitelist-managed

The simplest model. The issuer maintains a list of approved wallet addresses. Transfers to non-whitelisted addresses revert at the smart-contract level. Used by Spiko, Superstate, KAIO, Centrifuge, and WisdomTree on its EVM deployments. Fast, cheap, and well understood. The cost is that compliance is tied to the issuer — there is no portability between issuers, and no shared identity infrastructure.

Identity-anchored

Each investor is assigned a verified identity, and wallets are linked to that identity. Allows multiple wallets per investor, supports beneficial ownership tracking, and addresses regulatory caps on holder counts. Securitize uses this model, grouping multiple wallets under a single investor identifier to manage the US 2,000-holder threshold for private securities. From 2026, Securitize introduced dedicated on-chain vaults per investor identity to preserve beneficial-ownership traceability even when tokens are deployed into DeFi protocols.

Network-level compliance

The blockchain itself enforces compliance. Accounts are locked by default; verification unlocks them. Used by WisdomTree on Stellar and on Solana's Token-2022 deployments. Strongest model for enforcement consistency. Weakest for cross-chain composability.

Layer four — off-chain attestation

The most under-examined layer, and the one where most failures occur. Tokens representing claims on off-chain assets depend on off-chain truth. Someone must verify that the gold exists, that the building has not been sold, that the loan portfolio is performing, that the Treasury bills are held in the custody account. This verification is performed by custodians, transfer agents, auditors, and oracle providers.

Three patterns are common.

- Custodian attestation — the custodian publishes periodic statements of holdings. The most traditional model and the one most familiar to institutional investors.
- Auditor attestation — an external auditor provides a periodic report on holdings. Higher assurance, but typically less frequent.
- Oracle-based proof-of-reserve — an oracle provider, often Chainlink, publishes on-chain attestations of off-chain holdings. Higher frequency and on-chain verifiability, but inherits the same off-chain audit risk as traditional attestation.

> **A token is only as good as the most recent attestation of the asset it claims to represent.**

The token cannot prove the existence of the asset. It can only encode the result of someone else's proof. This is the core attestation gap, and it does not go away with tokenisation. It is merely relocated.

SECTION 03

The Benefits, Honestly Assessed

Five benefits are commonly attributed to tokenisation. The case for each varies. Some are genuine and material. Others are conditional. Some are overstated to the point of misleading.

This section examines each in turn, with an attempt to separate what is real from what is marketing.

Settlement efficiency

This is the most defensible benefit, and for many institutional use cases the most valuable. Traditional securities settlement runs on T+1 or T+2 timelines, with significant operational overhead in matching, reconciliation, and failure resolution. Tokenised securities can settle atomically — the asset and the payment move together, either both succeed or neither does.

JPMorgan's Kinexys settlement of tokenised Treasury transfers in 2025 demonstrated this at institutional scale. The atomic settlement of asset against payment eliminates settlement risk and removes the need for intermediate clearing infrastructure for that leg of the transaction. For high-volume, repeatable transactions — intra-day liquidity management, collateral mobility, repo, securities lending — the gains are material. For one-off allocations into long-duration assets, they are negligible.

Programmable distributions and corporate actions

Smart contracts allow distributions — coupons, dividends, rental income — to be paid automatically when conditions are met. Corporate actions — voting, share splits, redemptions — can be encoded directly. The operational cost of running these processes drops materially, particularly for fund administrators dealing with large numbers of holders. This is real and underrated. The biggest savings are not in the headline transaction cost. They are in the back-office operations that surround it.

Composability with on-chain liquidity

Tokenised assets can be used as collateral in on-chain lending protocols, deposited into liquidity venues, or wrapped into structured products without leaving the on-chain environment. This is genuinely new. There is no equivalent in traditional finance where a Treasury bill, an equity stake, and a stablecoin can be combined into a single composed position with atomic execution. The institutional use case is collateral mobility: a tokenised Treasury holding can be posted as margin on-chain in seconds, freeing capital from operational immobilisation. The risk is that composability concentrates dependencies. Every protocol the asset is composed into adds a counterparty layer.

Fractionalisation

The marketed benefit — anyone can own a piece of a building or a Picasso. The reality — fractionalisation works at the technical layer, but the legal and regulatory layers usually impose minimums, accredited investor requirements, or jurisdictional restrictions that constrain it. Where fractionalisation matters most for institutional allocators is at the secondary market level: position sizes can be calibrated more precisely and rebalancing is more efficient. But the headline retail narrative of fractional ownership of luxury assets is, at the institutional level, largely irrelevant.

Transparency

Every transaction is recorded on a public ledger. This is true. What it omits is that the recording is of token movements, not of underlying asset movements. The off-chain attestation gap, examined in section two, means the on-chain ledger is only as accurate as the off-chain attestation supporting it. Transparency at the wrapper layer should not be confused with transparency at the asset layer. They are different.

What is overstated

Twenty-four-hour trading

Possible in principle. In practice, secondary market depth for most tokenised RWA products is thin outside core market hours. Liquidity is provided primarily by the issuer or by a small number of market makers operating within their own constraints. Continuous trading is a feature; meaningful continuous liquidity is not yet a reality for most products.

Lower costs

True for high-frequency repeat issuance at scale. Largely untrue for first-time or low-volume issuers, where the cost of legal structuring, platform integration, custodian relationships, and ongoing compliance often exceeds the cost of a traditional issuance. Cost reduction in tokenisation is an economies-of-scale story. Institutions with frequent issuance programmes benefit; single-asset issuers usually do not.

Democratisation

Most institutional-grade tokenised products are restricted to accredited or professional investors. Public-permissioned tokens for retail exist but represent a minority of AUM. The democratisation narrative is largely marketing aimed at a retail audience that holds little of the actual capital.

Disintermediation

There are fewer intermediaries in the settlement layer. There are not fewer intermediaries overall. The custodian, the transfer agent, the legal structuring counsel, the auditor, and the oracle provider remain. The token issuer, the platform operator, and the smart contract administrator have been added. The net intermediary count is roughly unchanged. What has changed is the function each performs.

SECTION 04

The Risks and Traps

This is the section that matters most for institutional allocators. The benefits of tokenisation are well covered in vendor materials. The risks are not.

We organise the risk surface into eight categories. Each is examined in terms of what the risk is, where it sits, and how it should be evaluated.

4.1 Issuer risk

The token represents a claim on the issuer. The integrity of the claim depends on the issuer's solvency, regulatory standing, operational competence, and reporting integrity. This is not new — investors in any structured product face issuer risk. What is new in tokenisation is the breadth of issuers in market, the variability of their regulatory standing, and the absence in some cases of established credit history.

Key questions. Who is the issuer of record? In which jurisdiction is it incorporated? What is its regulatory licensing? What is its operating history? What disclosures does it produce? Who audits it? For BlackRock or Franklin Templeton issuances, these questions have settled answers. For smaller platforms, they do not.

4.2 Custodian risk

The underlying asset sits somewhere physically or electronically. The custodian holds it. The custodian's solvency, operational integrity, and segregation arrangements determine whether the token holder's claim can actually be enforced against the asset. This is the single largest risk in tokenised commodity products. The token represents a claim on gold held by a custodian; if the custodian fails, the claim becomes a general unsecured claim against an insolvent estate. The token's on-chain accuracy is irrelevant to that outcome.

Key questions. Where is the asset held? Under what title? Is it segregated from the custodian's general assets? What is the custodian's regulatory standing? What is the recourse path if the custodian fails?

4.3 Transfer agent and registrar risk

In tokenised securities, the transfer agent — typically Securitize for US-domiciled products — maintains the authoritative register of holders. The on-chain token movement is a representation; the legally binding register is the transfer agent's. If the on-chain record and the off-chain register diverge, the off-chain register typically prevails. This is a feature of the regulatory model, not a defect. It is also a counterparty layer that did not exist in pure blockchain-native instruments.

Key questions. Who is the transfer agent? What is their licensing? How are discrepancies between on-chain and off-chain records resolved? What is the operational continuity plan if the transfer agent fails?

4.4 Smart contract risk

The token is implemented as code. Code has bugs. Code can be exploited. Code can be upgraded — sometimes by the issuer, sometimes by a multi-signature committee, sometimes by a governance vote. Three concerns dominate: implementation defects, where the contract behaves differently than intended; upgradeability risk, where the issuer or administrator can change the contract logic after deployment; and admin key risk, where privileged roles can mint, burn, freeze, or transfer tokens unilaterally. None of these are necessarily flaws — upgradeability and admin controls are usually required for regulatory compliance. The point is that they must be priced as exposure. Governance rights are counterparty risk.

Key questions. Has the contract been audited, by whom, and how recently? What admin functions exist and who controls them? Is the contract upgradeable and under what process? What is the time delay between an administrative action and its execution?

4.5 Oracle and attestation risk

The on-chain token is a digital object. The off-chain asset is a physical or legal object. The bridge between them is an oracle or attestation process. Oracle risk has two components: the integrity of the data source — does the auditor actually verify what they claim to verify, at the frequency they claim — and the integrity of the on-chain reporting — is the oracle network honest, well-staked, and resistant to manipulation. Proof-of-reserve attestations are a partial solution. An on-chain attestation of holdings is only as good as the off-chain audit that produced it. The blockchain does not solve the audit problem. It records the result of someone else's audit.

Key questions. Who attests to the underlying? At what frequency? What are their professional obligations? What is the oracle infrastructure? What happens if attestation fails or lapses?

4.6 Liquidity risk

Tokenisation does not create liquidity. It creates the technical conditions for liquidity. Whether liquidity actually exists depends on demand. Most tokenised RWA secondary markets are thin. Tokenised Treasuries, the deepest market, trade with reasonable depth during US market hours; outside those hours, and across most other asset classes, secondary depth is dominated by issuer-redemption mechanisms rather than market-making. Investors who interpret the existence of a token as evidence of liquidity will be disappointed. The token is a wrapper. Liquidity is a separate variable.

Key questions. What is the secondary market venue? What is the average daily volume? Who are the market makers? Is there an issuer-backed redemption mechanism, at what notice, and with what gating provisions?

4.7 Legal wrapper enforceability

The wrapper structure is only as good as its enforceability in the jurisdictions that matter. A tokenised real estate investment may be structured through a Cayman trust holding a Delaware LLC holding a US property. If the property is in litigation, recovery depends on US courts recognising the chain of ownership. If they do not, the token is a claim against an empty chain. This is not a hypothetical. Several first-generation tokenised real estate platforms produced exactly this outcome — their token holders had nominal claims that proved unenforceable when the underlying went into dispute.

Key questions. In which jurisdictions is the legal structure enforceable? Has the structure been tested in court? What is the governing law of the token holder's claim? What is the dispute resolution mechanism?

4.8 Concentration and platform risk

Six platforms route most institutional RWA volume. A handful of custodians hold most of the underlying. A small number of audit firms attest to most of the reserves. This concentration creates correlated exposure: a regulatory action against one major platform, an operational failure at one major custodian, or a serious failure at one major auditor could propagate through products that do not appear connected. Institutional allocators should map their tokenised exposures by issuer, custodian, transfer agent, and auditor — not only by asset class. The correlations matter.

GOVERNANCE RIGHTS ARE COUNTERPARTY RISK.

A recurring theme across all eight categories. Every privileged role — issuer, custodian, administrator, oracle operator, governance multi-signature — represents a counterparty whose actions can affect the token holder. Their existence is not the problem. The problem is when they are not disclosed clearly, not constrained by time-locks or governance procedures, and not priced as risk by the investor.

SECTION 05

Tokenisation in Capital Markets Context

Tokenisation does not exist in isolation. It competes with — and in places complements — instruments that institutional allocators already understand. The right comparison is not crypto versus traditional finance. It is one wrapper versus another.

This section sets tokenised RWA against four reference instruments and identifies where it adds value and where it does not.

Versus traditional securitisation

Tokenised RWA is, in most institutional structures, programmable securitisation. The SPV wrapper is the same. The investor protections are similar. The legal documentation runs to comparable length and complexity. What changes is that the wrapper logic — transfer restrictions, distributions, holder identification — moves on-chain. The honest comparison: for a high-volume, repeat issuer with sophisticated investor identity infrastructure, tokenisation can compress operational cost. For an occasional or single-asset issuer, it adds infrastructure complexity without commensurate savings.

Versus REITs

Tokenised real estate is sometimes positioned against public REITs. The comparison is misleading. Tokenised real estate, in most current implementations, is structurally closer to a private REIT — small holder base, gated transfer, periodic NAV pricing, redemption at issuer discretion. It lacks the regulatory clarity and exchange-based liquidity of a public REIT. It also lacks the diversification and scale. The structural similarity to a private REIT is not a flaw, but it should be priced as such — illiquid, less diversified, with periodic mark-to-model rather than mark-to-market.

Versus private placement

Tokenised securities issued under Reg D, Reg S, or equivalent professional-investor frameworks are functionally private placements with on-chain settlement and identity gating. The investor universe is the same. The disclosure regime is similar. What tokenisation adds is operational efficiency — onboarding, distributions, secondary transfers, beneficial ownership tracking — all reduced in friction. What it does not add is access to new capital. The investor base is the same accredited universe.

Versus listed funds and ETFs

This is where tokenisation faces its hardest competitive test. A listed money market ETF and a tokenised Treasury fund deliver similar economic exposure. The ETF offers continuous exchange liquidity, well-established regulatory clarity, and minimal counterparty layers beyond the standard fund infrastructure. The tokenised version offers on-chain composability and atomic settlement against on-chain payment. For most allocators today, the ETF wins on simplicity, liquidity, and regulatory standing. The tokenised version wins for allocators with on-chain treasury or collateral mobility requirements. The two products are not in direct competition; they serve adjacent purposes.

Summary comparison

Dimension	Tokenised RWA	Traditional Securitisation	Listed ETF / Fund
Investor universe	Accredited / qualified, with whitelist gating	Institutional / qualified	Public, no gating
Settlement	T+0 atomic possible	T+2 to T+5 typical	T+1 standard
Liquidity profile	Thin secondary; issuer redemption primary	OTC, dealer-intermediated	Continuous exchange liquidity
Programmability	Native — distributions, voting, restrictions on-chain	Manual, operationally heavy	Limited; standardised by administrator
Composability	Can be posted as collateral, wrapped, composed	Limited; bilateral rehypothecation only	Limited; standardised margining only
Counterparty layers	Issuer, custodian, transfer agent, contract admin, oracle	Issuer, trustee, custodian, paying agent	Issuer, administrator, custodian, exchange, clearing house
Regulatory clarity	Jurisdictionally uneven	Settled, decades of precedent	Settled, well precedented

The table simplifies. Each dimension has nuance, and individual products vary materially. The point is structural. Tokenised RWA shares more in common with private placement and securitisation than with public listed instruments. Its competitive advantage lies in programmability and composability, not in liquidity or regulatory clarity. Allocators evaluating a tokenised product should compare it not to ETFs or to crypto-native assets, but to the closest traditional analogue — the private placement, the securitisation tranche, the trust certificate, the private REIT.

SECTION 06

The Regulatory Landscape

Tokenisation is a wrapper. Wrappers exist within legal and regulatory frameworks. The viability of a tokenised product depends as much on its jurisdictional positioning as on its technical architecture.

This section maps the regulatory landscape across the four jurisdictions that matter most for institutional capital — the United States, the European Union, the United Kingdom, and the principal Asia-Pacific centres. It then addresses the patchwork problem and identifies what is settled, what is unsettled, and what is shifting.

United States

The US regulatory position has been the most contested and is the most consequential, given the size of US institutional capital and the prominence of US dollar-denominated assets.

Securities and Exchange Commission

The SEC's posture has been consistent. A tokenised security is a security. The Howey test applies. Reg D, Reg S, and Reg A+ remain the operating frameworks for most institutional issuance. Tokenised products marketed to US persons typically use Reg D 506(c) for accredited investors or Reg S for non-US distribution. This is workable. It also means tokenisation does not unlock retail US capital under current rules; the accredited investor threshold continues to gate participation.

Commodity Futures Trading Commission

The CFTC has asserted jurisdiction over tokenised commodities and certain derivative structures. Tokenised gold, tokenised oil, and tokenised carbon credits sit in CFTC territory. The boundary between SEC and CFTC jurisdiction has been the principal source of US regulatory uncertainty for over a decade.

CLARITY Act and pending rule-making

The Digital Asset Market Structure Clarity Act, working through the US legislative process, would formalise the SEC and CFTC division for digital assets. Its passage would represent the most significant US regulatory development for tokenised assets to date. Until that settles, institutional issuers operate under the existing framework, which is functional but conservative. Most institutional issuance for US persons sits squarely within Reg D 506(c) — accredited only, with verification, with transfer restrictions.

State-level considerations

Money transmitter licensing applies in many states to payment-related tokens, not to pure RWA. State securities regulators retain authority over intrastate offerings. Wyoming and Texas have developed digital asset frameworks that have attracted some platform operators. New York's BitLicense regime is more restrictive.

European Union

The EU has produced the most comprehensive regulatory framework of any major jurisdiction. It also produced the most consequential carve-out.

MiCA

The Markets in Crypto-Assets Regulation, fully effective from late 2024, established categories for crypto-assets, authorisation requirements for issuers, reserve and disclosure requirements for stablecoins, and licensing for service providers. It is the most developed framework in the world for unregulated crypto-assets. MiCA does not apply to crypto-assets that qualify as financial instruments under MiFID II. Tokenised securities, tokenised funds, and most institutional RWA products fall outside MiCA and within the existing securities regime.

DLT Pilot Regime

Effective from March 2023, the DLT Pilot Regime allows the operation of market infrastructures for tokenised securities. Trading and settlement venues can be authorised to deal in DLT-issued financial instruments. The regime is time-limited and pilot-scoped, but it has produced a working environment for tokenised bond issuance and trading in several EU member states.

Alternative Investment Fund Managers Directive

Many tokenised credit and real estate products are structured as alternative investment funds. AIFM authorisation, depositary requirements, and disclosure obligations apply. Centrifuge's EU compliance strategy is anchored on AIFM authorisation. This is a workable path but a demanding one.

United Kingdom

The UK has moved more slowly than the EU on comprehensive frameworks but has produced workable interim guidance. The Financial Conduct Authority treats most tokenised securities as specified investments under existing rules. The HM Treasury Digital Securities Sandbox, operational from 2024, allows trading and settlement of tokenised securities under tailored conditions. The UK's approach is iterative and consultative — fewer headline frameworks than the EU, but a usable environment for institutional issuance, particularly for bonds and fund interests.

Asia-Pacific

Singapore

The Monetary Authority of Singapore has been the most proactive regulator globally on tokenisation. Project Guardian, a multi-year initiative involving major banks and asset managers, has piloted tokenised bonds, funds, and FX products. MAS licensing under the Payment Services Act and the Securities and Futures Act provides clear paths for both digital payment tokens and tokenised securities. Singapore is, for most non-US issuers, the leading jurisdiction for institutional tokenisation.

Hong Kong

The Securities and Futures Commission treats tokenised securities as Type 1 securities. Licensed virtual asset trading platforms can deal in tokenised products. Hong Kong has produced a more retail-permissive framework than Singapore, including for tokenised funds aimed at retail investors under specified conditions.

Japan

Japan's Financial Instruments and Exchange Act has been extended to cover Security Token Offerings. The Japan Security Token Association coordinates industry practice. Several major Japanese banks have issued tokenised bonds. The regulatory environment is clear and operating, though issuance volume remains modest by global standards.

The patchwork problem

Tokenised products are inherently global in their technical reach and inherently jurisdictional in their legal effect. A token deployed on Ethereum is theoretically transferable to any wallet anywhere. A token representing a regulated security is, in practice, transferable only to whitelisted holders in permitted jurisdictions. The reconciliation of global reach with jurisdictional restriction is the central regulatory challenge. It is solved primarily through compliance at the token layer — whitelist gating, identity verification, transfer restrictions. The cost is that liquidity fragments by jurisdiction. The benefit is that the product can be issued at all.

What is settled, unsettled, and shifting

What is settled

- Tokenised funds, treasuries, and investment-grade bonds have settled regulatory positions in most major jurisdictions, subject to existing securities and fund regulations.
- Issuance to accredited or professional investors under Reg D, Reg S, AIF, or equivalent regimes is operationally clear.
- Custodian and transfer agent requirements are established.
- Anti-money-laundering and identity verification obligations are uniformly applicable.

What is unsettled

- Tokenised real estate at the retail level. Most jurisdictions have not produced workable retail frameworks.
- Tokenised intellectual property and royalty streams. The asset class is novel and the regulatory categorisation is unclear in most jurisdictions.
- Tokenised carbon credits and environmental assets. The underlying asset itself is subject to ongoing regulatory development.
- Cross-border secondary market trading. The infrastructure exists; the regulatory permissions usually do not.
- DeFi integration of tokenised securities. Permitted under some frameworks for specific use cases; broadly prohibited in others.

Direction of travel

The trend is convergent. Major jurisdictions are independently arriving at similar positions — tokenised securities are securities, must be issued by authorised entities, must respect transfer restrictions, and must operate with authorised market infrastructure. The variability is in detail rather than principle. Allocators should expect continued tightening at the edges — tax reporting, beneficial ownership disclosure, sanctions compliance — and continued liberalisation at the centre — broader authorised investor categories, more permissioned trading venues, clearer cross-border recognition.

SECTION 07

Practical Considerations for Institutional Allocators

This section translates the preceding analysis into a working framework for due diligence and allocation. The framework is structured in three layers — the asset, the wrapper, and the operational integration.

Asset-first assessment

Begin with the underlying. Tokenisation does not change the economic characteristics of the asset. The same questions that apply to any investment apply here.

- What is the asset, and what is its yield, duration, credit, and liquidity profile?
- How does it fit existing portfolio allocation and risk constraints?
- What is the price reference, and is it reliably available?
- What are the conditions under which redemption or exit is available, and at what discount?

If the underlying is not an asset the allocator would hold in a traditional wrapper, the tokenised version should not be held either. The wrapper does not improve the asset.

Wrapper-second assessment

Once the asset is acceptable, evaluate the wrapper. This is where most of the new due diligence sits.

Legal structure

- What entity issues the token, and in what jurisdiction?
- What is the legal nature of the token holder's claim — equity, debt, beneficial interest, contractual right?
- Is the structure bankruptcy-remote from the issuer and its affiliates?
- Under what governing law are token holder claims enforceable, and in what dispute forum?

Custody and segregation

- Where is the underlying held, by whom, and under what title?
- Is the underlying segregated from the custodian's general assets?
- What is the custodian's regulatory licensing and insurance coverage?

Transfer agent and registry

- Who maintains the authoritative register of holders?
- How are discrepancies between on-chain records and off-chain registers resolved?
- What is the operational continuity plan?

Smart contract and admin authority

- Has the contract been audited, by whom, and how recently?
- What administrative functions exist — mint, burn, freeze, pause, recovery?
- Who holds the keys to these functions? Is there a time-lock or multi-party requirement?
- Is the contract upgradeable? Under what process?

Attestation

- Who attests to the existence and quality of the underlying?
- At what cadence, and to what standard?
- Is the attestation publicly available, and is it on-chain?

Operational integration

If the asset and the wrapper are acceptable, the third question is operational fit.

Custody on the allocator side

- Can the allocator's custodian hold the token? Many traditional custodians cannot.
- Is on-chain self-custody acceptable to the allocator's governance framework?
- What is the operational process for receiving, holding, and transferring the token?

Reporting and accounting

- How is the position reported in the allocator's general ledger?
- What is the accounting treatment under applicable GAAP or IFRS rules?
- How is the position valued for portfolio and risk reporting?

Tax

- How is income from the token characterised — interest, dividend, capital gain?
- How does the position interact with withholding and treaty considerations?
- What are the reporting obligations to tax authorities?

A note on platform selection

For most allocators, the choice is not which token to buy but which platform to access. The platform shapes the issuer set, the custody arrangements, the secondary market venues, and the operational workflow. Three criteria dominate.

- Regulatory standing — what licences does the platform hold, in which jurisdictions, and what is the supervisory history?
- Counterparty disclosure — does the platform clearly identify issuers, custodians, transfer agents, auditors, and admin authorities for each product?
- Operational integration — does the platform support the allocator's custody, reporting, and compliance infrastructure?

Platforms that score well on all three are few. Allocators should be prepared to do meaningful operational work to integrate the first one or two products. After that, the marginal cost of additional products on the same platform falls quickly.

SECTION 08

Conclusion: The Asset-First View

Tokenisation is a wrapper innovation, not an asset innovation. It rarely creates a new asset class. It creates a new way of holding, transferring, and settling claims on existing assets.

The case for engagement is real. Settlement efficiency, programmable distributions, and composability with on-chain liquidity venues offer genuine gains, particularly for allocators with frequent issuance programmes, on-chain treasury operations, or collateral mobility requirements.

The case against premature engagement is also real. The wrapper introduces counterparty layers that did not exist in traditional structures — smart contract administrators, oracle operators, platform-specific transfer agents, identity verification providers. Each is a counterparty whose actions affect the token holder. None disappears because the asset is on-chain.

The honest framework for allocation is the same framework that applies to any structured product. Assess the asset. Assess the wrapper. Assess the enforcement path. Price the counterparty exposure. Confirm operational integration. Allocate at sizing that reflects the risk.

Tokenisation does not change what assets are. It changes how claims on them are held, transferred, and composed. For some allocators, that change is materially valuable. For others, it is operational complexity without commensurate benefit. The discriminating question is not whether tokenisation is good or bad as a category. It is whether a specific tokenised product, in a specific allocator's portfolio, delivers benefits that exceed the costs of the additional counterparty layers and operational requirements it introduces.

The question is concrete, not abstract. The answer will vary by asset, by wrapper, by jurisdiction, and by allocator. The framework above is offered as a working tool for making that determination consistently.

> **The most reliable predictor of allocation outcomes is the rigour applied to the wrapper, not the enthusiasm applied to the asset.**

A closing observation. Allocators who treat tokenisation as a thesis tend to be disappointed. Allocators who treat each tokenised product as a structured wrapper around a familiar underlying tend to be neither over-allocated nor under-allocated. They are allocated correctly, with their eyes open, to the exposures they actually intend to hold. That is what asset-first means in practice.

REFERENCE

Glossary

AIF / AIFM

Alternative Investment Fund / Alternative Investment Fund Manager. The EU regulatory regime for funds not falling within UCITS, including most private equity, private credit, and hedge funds. Many tokenised credit and real estate products are structured as AIFs.

Atomic settlement

Settlement where two or more transfers — typically an asset transfer and a payment transfer — either both succeed or neither does, within a single transaction. Eliminates settlement risk between the legs.

CLARITY Act

The Digital Asset Market Structure Clarity Act, US legislation intended to formalise the division of regulatory jurisdiction over digital assets between the SEC and the CFTC. As of mid-2026, the legislative process remains active.

Composability

The ability for one on-chain instrument to be used within another — for example, posting a tokenised Treasury as collateral in a lending protocol, or wrapping it into a structured product.

DLT Pilot Regime

EU regulation effective from March 2023 permitting authorised market infrastructures to trade and settle DLT-based financial instruments under tailored conditions. Currently the principal vehicle for institutional tokenised securities issuance and trading in the EU.

ERC-3643

Compliance-embedded token standard for permissioned security tokens on EVM chains. Embeds identity verification, whitelist gating, transfer restrictions, and recovery mechanisms into the token contract. The current institutional reference standard.

MiCA

Markets in Crypto-Assets Regulation. EU regulation, fully effective from late 2024, governing crypto-assets that are not financial instruments under MiFID II. Most institutional tokenised securities sit outside MiCA and within MiFID II.

Proof-of-Reserve

On-chain attestation that off-chain assets backing a tokenised product exist in stated quantity. Commonly implemented through Chainlink and equivalent oracle networks. Inherits the audit quality of the underlying off-chain verification.

SPV

Special Purpose Vehicle. A legal entity formed for a specific transaction or asset, typically with bankruptcy-remoteness from its parent. The most common legal wrapper for tokenised assets.

Transfer agent

A regulated entity that maintains the authoritative register of holders for a security. In US-domiciled tokenised securities, the transfer agent's register typically takes legal precedence over the on-chain token ledger.

Whitelist gating

A compliance mechanism where token transfers are restricted to addresses that have been pre-approved by the issuer or its agent. The dominant compliance model in institutional tokenised products.

REFERENCE

Selected References and Further Reading

This paper draws on industry data and regulatory documentation current as of mid-2026. The following sources are starting points for further reading. Inclusion does not constitute endorsement.

Industry data and dashboards

- RWA.xyz — on-chain dashboard for tokenised RWA AUM by issuer, chain, and asset class.
- RedStone, Credora, Gauntlet, and Dune — Tokenization and RWA Standards Report (2026).

Regulatory sources

- US Securities and Exchange Commission — Framework for Investment Contract Analysis of Digital Assets.
- European Securities and Markets Authority — Markets in Crypto-Assets Regulation guidance.
- Monetary Authority of Singapore — Project Guardian reports and consultation papers.
- Hong Kong Securities and Futures Commission — circulars on tokenised securities and virtual asset trading platforms.

Token standard and infrastructure documentation

- ERC-3643 Association — technical standard and member directory.
- Chainlink — Cross-Chain Interoperability Protocol and Proof-of-Reserve documentation.
- Solana Foundation — Token-2022 program documentation.

Platform documentation

- Securitize, Ondo Finance, Backed Finance, Centrifuge, Hashnote, Plume Network — public product and structuring documentation.

Crave MANAGEMENT

MAJOR PROJECTS · TOKENISED CAPITAL

CRAVE MANAGEMENT

Serious projects, delivered seriously.

Strategic advisors & tech studio. We help institutions and governments fund, build and launch major projects through tokenisation — strategy, build and deployment under one engagement.

partners@cravemanagement.co · cravemanagement.co