

Why Tokenized Funds Will Scale Before Tokenized Projects

Fiduciary Risk, Governance Continuity, and the Logic of Sequenced Adoption

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Abstract

Tokenization of real-world assets is frequently presented as a uniform technological shift across asset classes. In practice, adoption has followed a distinct and predictable pattern — one shaped by institutional structure rather than technological readiness. Tokenized investment funds — particularly money market funds, short-duration government bond vehicles, and similar pooled vehicles — have attracted early institutional participation, while tokenized infrastructure and project-level assets remain largely experimental.

This paper argues that this sequencing reflects structural differences in fiduciary risk, governance complexity, and market design requirements — not technological readiness or regulatory timing. Tokenized funds scale first because they inherit established legal structures, standardized governance, and familiar risk allocation frameworks. Tokenized projects, by contrast, introduce bespoke legal, operational, and governance challenges that institutional investors are structurally constrained to avoid. Fiduciary duty is the binding constraint, not the limiting technology.

The analysis has direct implications for asset managers, regulators, and platform designers seeking to understand how institutional capital absorbs financial innovation — and why governance compatibility, not programmability, determines adoption sequencing.

Keywords: real-world asset (RWA) tokenization; tokenized funds; institutional adoption; market design; fiduciary risk; governance structures; legal standardization; regulatory compatibility; project finance; financial infrastructure.

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1. Introduction

Distributed ledger technology has made it technically feasible to represent ownership interests in financial and real-world assets through digital tokens. Advocates of tokenization emphasize efficiency gains, programmability, and broader market access. Yet institutional adoption has been selective rather than comprehensive.

Early institutional traction has emerged in tokenized funds, particularly conservative, highly regulated vehicles. Project-level tokenization — including infrastructure assets, renewable energy projects, and bespoke real estate developments — has struggled to move beyond pilots. This paper argues that the observed adoption pattern is driven less by technological readiness than by institutional constraints embedded in fiduciary duty, governance structure, and market design.

1.1 Why sequencing matters in institutional financial innovation

Debates around real-world asset tokenization are often framed in terms of technical feasibility or regulatory timing — whether distributed ledger infrastructure is sufficiently mature, or whether regulatory frameworks will eventually catch up. This framing misses a more fundamental issue: institutional adoption of financial innovation is inherently sequential, not simultaneous. New financial technologies are absorbed first in domains where existing legal, governance, and fiduciary structures already accommodate incremental change (BIS, 2023).

Historical precedents illustrate this pattern clearly. Exchange-traded funds scaled first in highly standardized public equity markets long before more complex asset classes were incorporated. Securitization initially expanded through homogeneous mortgage pools rather than idiosyncratic commercial assets. In each case, institutional uptake followed governance compatibility, not technological novelty.

Tokenization follows the same logic. The question facing institutional investors is not whether assets can be tokenized, but where tokenization can be adopted without destabilizing established accountability, oversight, and risk-allocation mechanisms. Misunderstanding this dynamic leads to persistently overestimating how ready project-level tokenization is for institutions, while underestimating the institutional traction that fund-based structures are already achieving.

This paper situates tokenized funds as the natural institutional entry point for real-world asset tokenization — not a temporary compromise, but a structurally coherent first phase in a longer process of financial integration.

2. Tokenized funds as an institutional entry point

Tokenized funds are investment vehicles whose shares are issued or recorded on a distributed ledger while remaining embedded within existing fund law, custody arrangements, and regulatory oversight. In these structures, tokenization alters the form of record-keeping and

settlement — not the underlying allocation of rights and responsibilities. This distinction is what makes them institutionally viable where project tokenization is not (Sing, 2023a).

Institutional case examples

Three high-profile cases illustrate why funds have emerged as the first scalable use case, and how each confirms the governance-first thesis.

BlackRock — USD Institutional Digital Liquidity Fund (BUIDL). BlackRock's launch of BUIDL demonstrates a governance-first approach to tokenization. The fund invests in traditional money market instruments and is structured to comply with existing regulatory and fiduciary requirements. Tokenization enhances settlement efficiency and operational transparency without redefining ownership or governance — precisely the pattern that institutional adoption requires (BlackRock, 2024).

Franklin Templeton — On-Chain U.S. Government Money Fund (FOBXX). Franklin Templeton's on-chain money market fund is among the earliest sustained implementations of tokenized fund shares. The fund operates within conventional securities law frameworks, with tokenization serving as an alternative transfer and record mechanism rather than a structural redesign of rights (Franklin Templeton, 2023).

JPMorgan — Onyx Digital Assets and tokenized deposit initiatives. JPMorgan's Onyx platform illustrates a bank-led, compliance-first approach. Tokenization initiatives are embedded within regulated financial institutions and rely on established governance, risk management, and supervisory engagement — reinforcing rather than bypassing existing institutional infrastructure (JPMorgan Chase, 2023).

Across all three cases, tokenization is additive rather than substitutive. Governance, fiduciary responsibility, and legal enforceability remain anchored in familiar institutional forms. This is the template for scalable adoption.

3. Fiduciary duty as a binding constraint on tokenization

While technological capability enables tokenization, fiduciary duty constrains it. Institutional investors — pension funds, insurers, banks, asset managers, and fiduciaries acting on behalf of beneficiaries — operate under legal and organizational obligations that fundamentally shape how and where innovation can be adopted. These obligations are not discretionary preferences; they are binding constraints embedded in governance frameworks, regulatory oversight, and professional standards (Sing, 2023b).

Tokenization proposals that overlook fiduciary structure tend to misdiagnose the sources of institutional resistance. The limiting factor is rarely efficiency or operational capability. It is whether tokenized structures preserve clarity of responsibility, continuity of oversight, and enforceable rights under stress.

3.1 Fiduciary duty in institutional investment practice

Fiduciary duty requires institutional investors to act with care, loyalty, and prudence in managing assets on behalf of beneficiaries. In practice, this entails more than return maximization.

Fiduciaries must ensure that assets are held within structures that allow for ongoing oversight, risk monitoring, auditability, and intervention when conditions deviate from expectations (CPMI, IOSCO, & BIS, 2012).

Fiduciary responsibility is exercised through institutional mechanisms rather than individual discretion. Boards, trustees, investment committees, custodians, and regulators collectively form a governance ecosystem that distributes authority and accountability. Innovations that bypass or destabilize this ecosystem impose risks that fiduciaries are neither authorized nor equipped to absorb.

Tokenization initiatives that change the form of record-keeping without altering fiduciary relationships are therefore more readily acceptable than those that implicitly shift responsibility without establishing new accountability frameworks.

3.2 Why tokenized funds fit fiduciary workflows

Tokenized funds integrate into existing fiduciary workflows because they preserve the core architecture of institutional oversight. Fund structures already define roles for managers, custodians, administrators, auditors, and regulators. Tokenization modifies how ownership interests are recorded or transferred — not who is responsible for governance, compliance, or risk management.

From a fiduciary perspective, this continuity is decisive. Boards continue to exercise oversight, custodians retain safeguarding functions, and regulatory reporting obligations remain intact. Tokenization becomes an operational enhancement rather than a governance disruption. As a result, fiduciaries can evaluate tokenized funds using familiar criteria: investment mandate alignment, counterparty risk, liquidity management, and regulatory compliance. This explains why conservative vehicles such as money market funds have attracted early institutional participation.

3.3 Why tokenized projects violate fiduciary assumptions

Tokenized projects involve the direct representation of claims on individual assets or ventures. These assets typically rely on bespoke legal structures, involve ongoing operational risk, and generate cash flows contingent on physical performance rather than pooled, portfolio-level exposure.

Evidence from pilot initiatives in infrastructure and real estate reveals recurring structural characteristics. Project-level tokenization frequently operates across fragmented legal jurisdictions, relies on project-specific governance arrangements, and lacks clearly defined

authority for intervention, modification, or dispute resolution under stress. These deficiencies are compounded by limited and often illusory secondary market liquidity.

Even where project tokenization is technically functional, these structures impose fiduciary and operational risks that institutional investors are not positioned to absorb at scale. Tokenization in this context diffuses responsibility rather than clarifying it — creating an asymmetry between exposure and control that fiduciary frameworks are explicitly designed to prevent. The same structural problem arises in private credit, where introducing secondary tradability without preserving covenant enforcement and lender oversight consistently weakens the governance mechanisms that underpin credit performance (Sing, 2023c). In both cases, the pursuit of transferability without governance leads to structures that distribute exposure without assigning accountability.

4. Funds vs. projects: Structural differences in institutional compatibility

The divergent adoption trajectories of tokenized funds and tokenized projects reflect deep structural differences rather than temporary market conditions. These differences span legal form, governance continuity, fiduciary risk, liquidity expectations, and regulatory treatment.

4.1 Legal standardization and enforceability

Investment funds operate within mature legal frameworks that standardize ownership rights, disclosure obligations, and investor protections. These frameworks facilitate transferability and secondary trading without renegotiating underlying contracts. For institutions, legal standardization is a prerequisite for scale, not an optional enhancement (OECD, 2020).

Project assets rely on bespoke legal arrangements tied to specific assets, jurisdictions, and counterparties. Tokenization does not eliminate this complexity; it digitizes it. The underlying enforceability problem remains unchanged.

4.2 Governance continuity across the asset lifecycle

Fund governance persists across market cycles, personnel changes, and technological upgrades. Boards, trustees, and regulators provide continuity even as operational systems evolve — a feature that long-duration institutional mandates depend upon.

Projects lack this continuity. Governance resets at each refinancing, ownership transfer, or contractual renegotiation. Tokenization can exacerbate this fragility by introducing new layers of complexity without stabilizing the underlying authority structure.

4.3 Liquidity expectations and market realism

Liquidity in institutional contexts is not absolute; it is structured. Funds manage liquidity through redemption rules, gates, and disclosure, aligning investor expectations with asset behavior. Projects lack comparable mechanisms. Tokenized representations do not create liquid markets

where none structurally exist. For fiduciaries, the risk of illusory liquidity is more problematic than acknowledged illiquidity — because it misrepresents the risk profile of the underlying exposure.

Table 1. Structural differences between tokenized funds and tokenized projects

Dimension	Tokenized Funds	Tokenized Projects
Legal structure	Established fund law	Bespoke contracts
Governance	Standardized (boards, custodians)	Project-specific
Fiduciary risk	Familiar and contained	Elevated and diffuse
Liquidity expectations	Defined and managed	Uncertain and often illusory
Regulatory fit	High	Fragmented

These structural differences explain why institutional adoption consistently favors fund-level tokenization over project-level experimentation. Funds translate tokenization into a change in settlement and record-keeping. Projects attempt to tokenize governance, legal enforceability, and operational discretion simultaneously. For institutional investors, the former is an incremental adjustment; the latter represents a fundamental incompatibility with the accountability frameworks they are required to maintain.

5. Regulatory posture and geographic patterns

Regulatory approaches reinforce rather than explain the adoption sequencing described in this paper. Across major financial hubs, tokenized funds are treated as extensions of existing financial instruments and regulated accordingly. Project tokenization receives greater scrutiny precisely because existing supervisory frameworks have no established category for it.

Table 2. Comparative regulatory posture across jurisdictions

Jurisdiction	Tokenized Funds	Tokenized Projects
United States (SEC)	Permissible within securities law	High scrutiny
European Union (MiCA / ESMA)	Structured framework	Evolving
Hong Kong (SFC / HKMA)	Sandbox and fund pilots	Limited
Singapore (MAS)	Institution-led experimentation	Selective
Middle East (ADGM / VARA)	Hub-oriented, fund-first	Pilot stage

Despite differences in regulatory philosophy, the pattern across jurisdictions is consistent: fund-level tokenization is prioritized because it preserves the supervisory anchors — identifiable entities, accountable managers, and auditable processes — that regulators depend on to exercise oversight. Project tokenization diffuses these anchors across contractual and technological layers that are difficult to monitor or remediate (IOSCO, 2020).

This cross-jurisdictional convergence is analytically important: it demonstrates that fund-first adoption is not a local regulatory preference but a structural consequence of how institutional capital absorbs innovation across different legal regimes. It suggests that the institutional logic driving fund-first adoption is not jurisdiction-specific — it reflects a structural feature of how regulated capital markets absorb innovation.

6. Common counterarguments and why they fail

Advocates of project-level tokenization advance recurring arguments to explain the slow pace of adoption. These arguments underestimate the structural role of fiduciary governance and overestimate how much technology can substitute for institutional design.

6.1 "Technology will mature"

Technical maturation does not resolve governance ambiguity. Institutional markets already operate on well-established systems. The binding constraint is authority and accountability, not throughput or programmability. A more capable blockchain does not resolve the question of who bears legal and fiduciary responsibility when a tokenized infrastructure asset underperforms. Smart contracts can automate rule execution, but they cannot create the institutional accountability — the trustees, boards, and regulated entities — that institutional investors require before committing capital. These are the structures required when a tokenized infrastructure asset underperforms or a governance dispute arises across jurisdictions.

6.2 "Regulation will catch up"

Regulation does not precede institutional form; it codifies it. Funds receive regulatory clarity because they align with existing fiduciary models that regulators already understand and can supervise. Projects do not lack regulation — they lack standardized governance structures that regulation can recognize and enforce. Regulatory clarity for funds is therefore a result of funds already fitting within established fiduciary models — not what enables institutions to adopt them in the first place. When governance structure leads, regulatory recognition follows. (WEF, 2023).

6.3 "Retail adoption proves viability"

Retail participation does not validate institutional suitability. Retail investors operate under different risk tolerances, governance expectations, and legal protections. Institutional capital requires enforceable oversight, continuity of accountability, and regulatory recognition — none of which are established by demonstrated retail uptake.

7. Implications for market design and institutional strategy

Understanding why tokenized funds scale before tokenized projects has direct implications for asset managers, regulators, and platform designers. These implications extend beyond tokenization, offering insight into how institutional markets absorb financial innovation more broadly: adoption proceeds through existing accountability structures, not around them.

7.1 Implications for asset managers

Asset managers seeking to adopt tokenization should prioritize fund-based structures that preserve fiduciary continuity. Hybrid models — where tokenization enhances settlement, record-keeping, or transparency while governance remains conventional — are likely to dominate early adoption.

From an institutional liability perspective, this sequencing reflects structural constraint rather than resistance to innovation. Asset managers remain accountable for suitability, oversight, and risk outcomes regardless of technological form. Structures that preserve established governance pathways are therefore materially more attractive than those that redistribute responsibility without establishing clear authority.

7.2 Implications for regulators

Regulators rationally prioritize fund-level tokenization because it preserves existing supervisory frameworks and enforcement capabilities. Attempts to accelerate project-level tokenization without governance standardization risk regulatory fragmentation rather than productive innovation.

This prioritization reflects how regulatory frameworks are built — around familiar structures they can supervise — rather than any institutional bias against innovation. Supervisory frameworks are built around identifiable entities, accountable managers, and auditable processes. Tokenized funds preserve these anchors. Tokenized projects often diffuse them in ways that are difficult to monitor or remediate after the fact (IOSCO, 2020).

7.3 Implications for tokenization platforms

Platforms that seek to bypass institutional intermediaries face structural limits that technology cannot resolve. Successful platforms will integrate with custodians, administrators, asset managers, and regulators rather than attempting to displace them. In institutional markets, scalability depends on trust, liability alignment, and regulatory recognition — not disintermediation.

Platforms that embed themselves within existing governance ecosystems are therefore more likely to achieve durable adoption. Those optimized solely for transactional efficiency will find that the market they are targeting requires something their architecture does not provide.

Across all three audiences, three structural principles hold: governance must precede technological implementation; standardized vehicles scale more readily than bespoke assets; and institutional adoption proceeds incrementally through existing systems rather than through wholesale replacement.

8. Conclusion

Tokenized funds scale before tokenized projects not because they are more technologically advanced, but because they are institutionally compatible. Funds preserve fiduciary clarity, governance continuity, and regulatory alignment, allowing tokenization to be absorbed incrementally rather than disruptively. Project-level tokenization introduces bespoke legal and operational risks that institutions are structurally constrained to avoid — not as a matter of preference, but as a condition of their fiduciary mandates.

Recognizing this sequencing reframes tokenization not as a race toward disintermediation, but as a process of institutional integration. Tokenization succeeds not by replacing governance, but by conforming to it. For policymakers, asset owners, and market designers, the critical question is therefore not how quickly assets can be tokenized, but under what institutional conditions tokenization can endure.

The sequencing described in this paper is not a temporary feature of an immature market. It is a structural consequence of how fiduciary accountability, legal enforceability, and governance continuity interact with financial innovation. Understanding that sequence is a precondition for designing tokenization systems that last.

References

Banerjee, A., & Bode, I. D. (2023). Tokenization: A digital-asset déjà vu. *McKinsey & Company Financial Services Practice*.

<https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/tokenization%20a%20digital%20asset%20deja%20vu/tokenization-a-digital-asset-deja-vu-final.pdf?shouldIndex=false>

BIS. (2020). *Central bank digital currencies: Foundational principles and core features*. Bank for International Settlements. <https://www.bis.org/publ/othp33.htm>

BIS. (2023). *Annual economic report, chapter III: Blueprint for the future monetary system*. Bank for International Settlements. <https://www.bis.org/publ/arpdf/ar2023e3.htm>

BlackRock. (2024). *BlackRock launches its first tokenized fund, BUIDL*. BlackRock. <https://www.blackrock.com/us/individual/about-us/newsroom>

CPMI, IOSCO, & BIS. (2012). *Principles for financial market infrastructures*. Committee on Payments and Market Infrastructures; International Organization of Securities Commissions; Bank for International Settlements. <https://www.bis.org/cpmi/publ/d101a.htm>

Franklin Templeton. (2023). *Franklin OnChain U.S. government money fund*. <https://www.franklintempleton.com/investments/options/money-market-funds/products/29386/SINGLCLASS/franklin-on-chain-u-s-government-money-fund/FOBXX>

IOSCO. (2020). *Issues, risks and regulatory considerations relating to crypto-asset trading platforms*. International Organization of Securities Commissions. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD649.pdf>

JPMorgan Chase. (2023). *Project EPIC: Fueling tokenized finance with on-chain enterprise privacy, identity, and composability*. Kinexys Digital Assets. <https://www.jpmorgan.com/kinexys/documents/JPMC-Kinexys-Project-Epic-Whitepaper-2024.pdf>

OECD. (2020). *The tokenisation of assets and potential implications for financial markets*. OECD Blockchain Policy Series. <https://www.oecd.org/finance/The-Tokenisation-of-Assets-and-Potential-Implications-for-Financial-Markets.pdf>

Sing, C. H. (2023a). The RWA tokenization stack: Why institutional design determines what technology cannot. Working paper.

Sing, C. H. (2023b). Fiduciary duty in complex organizations: A process-based framework for governance evaluation and oversight. Working paper.

Sing, C. H. (2023c). Private credit as a structural allocation: Why governance, not yield, determines long-term outcomes. Working paper.

WEF. (2023). *Pathways to the regulation of crypto assets*. World Economic Forum.

https://www3.weforum.org/docs/WEF_Pathways_to_the_Regulation_of_Crypto_Assets_2023.pdf