Fund Tokenization

Beyond the Horizon Line: The Cost of Missing Out

Cash Euro Launch Version

December 25

Market Research Report

Amundi Business Intelligence
business.intelligence@amundi.com

Amundi Business Intelligence
business.intelligence@amundi.com

Contents

1 Key Takeaways

Fundamentals Making the Right Technological Decisions • *A technology that is well understood* • *Use cases for operations, portfolio management & distribution* • *Use cases hindered by various limitations* • *Choices in terms of native vs non-native, private vs public blockchain*	• Distributed Ledger Technologies (DLT), which have been utilized for financial purposes since the launch of Bitcoin in 2008, present various use cases for the tokenization of Real World Assets ("RWA")—essentially any financial or non-financial assets that exist off-chain. • The most discussed cases regrouped in three functional categories are: 1. **Operations** ▪ Automated corporate actions ▪ Automated compliance & reporting ▪ Faster settlement & clearing 2. **Portfolio Management** ▪ Dynamic fund structure ▪ Real Time NAV ▪ Transaction collateral 3. **Distribution** ▪ Fractional ownership ▪ Access to illiquid assets ▪ Higher Trading Frequency ▪ 24/7 Transferability & Global Access • Yet, while fund tokenization holds significant promises, it remains hindered by infrastructure gaps, limited market liquidity, regulatory challenges, and unclear business incentives, all of which constrain its broader adoption. • Beyond getting used to a new technological framework and vocabulary (**DLT, blockchain, private & public blockchain, permissioning, whitelisting, smart contracts, native tokens, hybrid model, tokenization agent**), asset managers entering the tokenization field must make decisions with respect to the tokenization operational (i.e. **native vs non-native**) and technological model (e.g. **private vs public blockchain**). • We observed a mixed distribution between the use of **private blockchains, which appear to be more prevalent in Europe, and public blockchains, which are more common in the United States**. Whereas asset managers appear to have used private blockchains to launch their first tokenized funds, sometimes in a sandboxed environment, we note an increase in the use of public blockchains.
Regulation A Techno Neutral, Supportive Approach • *Major regulators have developed their tokenization frameworks* • *Regulation that generally applies to tokens is the same*	• The global regulatory environment for fund tokenization is driven by regulators that are broadly supportive in principle but conservative in practice. • Such supportive but cautious stance is illustrated by the introduction of **regulatory sandboxes** in many countries with some major exceptions including the US, Luxembourg and Ireland, as regulators seek to test tokenized fund models under controlled conditions before amending their regulation. • For most markets (Europe, US, Asia), regulations tend to focus on substance over form as financial regulators generally put forward a "technology neutral" stance. **Tokenized shares are still securities—**subject to the same licensing, disclosure, AML/KYC, and custody requirements. • Overall, even if the EU offers a clearer, more supportive regulatory environment for tokenized funds, compared to the US' fragmented environment, we note that this has not stopped the US from developing the largest tokenized fund market in the world, with a certain number of US

as the underlying financial instrument • *Sandboxing associated to private blockchain*	manager funds being set up offshore in the British Virgin Island or Bermudas in order to tap the institutional market.
Market & Revenues The Trillions Will Come, Eventually • *$10bn global tokenized fund market* • *$600bn consensus forecast in 2030* • *$4bn in net revenues in 2030* • *Muted impact on costs*	• **We estimate the tokenized fund market size at approximately $10 billion**, using data provided by data vendors compiling tokenized funds on public blockchains as well as our own mapping of tokenized funds worldwide. By way of comparison, the AUM of the mutual fund industry amounts to €61.2 trillion and the global asset management industry oversees $128 trillion globally. • **Market size forecasts** by third-party researchers **vary widely** from **$300 billion to $1.3 trillion by 2030**, depending on the chosen scenario. • **Amundi BI's** conservative, "more of the same" scenario is of $30bn in tokenized fund assets by 2030, assuming an ongoing CAGR of 25% per year. Our **neutral scenario**, assuming more uptake from traditional distributors lands at **$120bn** in 2030. • The **2030 consensus scenario** puts the market at **$600bn—**which appears somewhat optimistic. The market will remain concentrated in the United States, which has a head start in decentralized finance and represents over 50% of the fund industry worldwide. • We evaluate the possible **global annual net revenue** opportunity for the asset management industry at approximately **$4bn by 2030**. By comparison, the **net revenues** of the asset management industry currently amount to approximately **$310bn**. • The overall industry **impact on cost** is expected at best to be **muted** as **on-chain** and **offchain** operational processes continue to **coexist** for a long period. Fund managers lacking the in-house skills and resources needed to maintain and oversee the technological systems required for tokenization will need to hire in-house staff with the right qualifications and contract with new technology providers, further adding to the costs.
Distribution The Digital Native Thesis • *Digital native investors to diversify away from crypto* • *$4 trillion crypto market* • *58% of digital wallets in Asia* • *Initial growth from DeFi ecosystem* • *Current investor base biased towards professional investors* • *Retail growth potential from pure onchain distributor*	• Investors who will probably find the most value in tokenized funds are the **digital native** ones. These investors are more likely to be based in **Asia** given the spread of cryptocurrencies in that region of the world (58% of digital wallets worldwide are located in Asia). • A good proxy for these digital native investors is the **crypto market cap** (including stablecoins), which varies between **$3 and $4 trillion**, concentrated in a handful of cryptos (Bitcoin, Ethereum) and stablecoins (USDC, USDT). • A portion of these growing assets will migrate to real world assets as digitally native investors either derisk and diversify their holdings while remaining onchain. • Much of the growth in tokenized fund assets so far has been driven by professional investments from the DeFi financial companies in the US, something that could be replicated in other regions of the world. Examples of such DeFi companies include Ondo Finance, OpenEden & OpenTrade. • The current investor base for tokenized fund assets is currently biased towards professional investors given the private (i.e. exempt from registration) nature of some dominant US tokenized funds, as well as the relatively limited distribution outlets for tokenized funds. • Only a handful of large-scale tokenized funds are directly available to retail investors today, including in the US the Franklin Onchain U.S. Government Money Fund (BENJI) and the WisdomTree Government Money Market Digital Fund (WTGXX). In Europe, the best-known examples of directly distributed

including cryptocurrencies exchange	fund available to retail investors are Spiko's Euro and USD money market funds. • Managers have various options to choose from when choosing how to distribute a tokenized fund (B2B, D2C, B2C), with new actors including digital distributors habilitated to distribute both tokenized financial securities and cryptocurrencies. Depending on the chosen distribution channel (which will depend in large part on the structure of the tokenized funds, i.e. essentially native or hybrid), the potential to target digitally native investors in the long term will vary. • For asset managers, at least in the short term, the real distribution business boost from the onchain world may come from getting access to **cryptocurrencies exchange**. For now, the development of tokenized fund distribution on centralized crypto exchange is limited in large part by the impediments to the development of a secondary market for tokenized fund assets and the need for such exchange to obtain the right license as investment firm allowed to distribute financial securities.
Competition After the Neobanks, the Neomanagers? • *4 operational models* • *75 fully onchain funds worldwide* • *7 funds representing 80% of the market value* • *BlackRock BUIDL leads with $2.8bn, followed by Franklin Templeton $0.8bn* • *90% of the tokenized fund AUM in money markets* • *Neomanagers delegate the management of their funds, or use offchain or onchain funds as collateral* • *Marginal private market tokenization* • *ETF asset-backed tokens spreading*	• The four tokenization operational models include: 1. **Delegation Model:** Portfolio management on behalf of a neomanager with limited proprietary asset management capabilities (e.g. Spiko; Anemoy; BlackRock & Circle); 2. **Asset-Backed Model:** Tokens backed by a portfolio of fund shares issued by a financial service company (e.g. Ondo Finance, OpenEden, OpenTrade; Backed Finance; Swarm); 3. **Hybrid Model:** Fund shares issued in parallel offchain and onchain directly from a single fund (e.g. FundsDLT & Natixis/Ostrum; IZNES & Carmignac; Allfunds & BNPAM) 4. **Native Model:** Fund shares are exclusively issued, registered, and traded via the DLT (BlackRock; Franklin Templeton (US & Luxembourg), China AMC; Janus Henderson Anemoy; Spiko). • 75 fully onchain funds are active on the market, with BlackRock, Franklin Templeton, Ondo Finance, and Superstate leading in the US, Spiko in Europe, and China AMC in Asia. BlackRock's BUIDL($2.8bn) fund alone accounts for 35% of the market, with seven funds controlling 80% of total value, largely fueled by inflows from stablecoin reserves and offshore tokenized funds issued by DeFi managers like OpenEden and OpenTrade. • Over 90% of tokenized assets remain in money market funds, with demand driven by onchain investors seeking cash-like instruments. • Private market tokenization remains limited, with early efforts by Securitize and platforms like ADDX and Invesco focusing on pilot projects. Hamilton Lane has been a leader in this space, launching multiple tokenized funds since 2022, reducing investment minimums, and expanding access through partnerships in the U.S. and Europe. • ETFs have seen no direct tokenization activity, with most initiatives involving tokens backed by ETFs (e.g. recent announcement by Robinhood) rather than directly issued on distributed ledgers. • Overall, recent market surveys indicate growing but still cautious interest among asset managers for tokenization & DLT in general, with 29% using DLT in live operations in 2025, up from 11% in 2024, and a 48% increase in staff engagement year-over-year. Tokenization is gradually gaining strategic importance, and some firms are appointing dedicated leaders to oversee

	tokenization projects, ensuring alignment across commercial, investment, operational, and legal teams.

2 Methodology & Acknowledgement

This report is the result of the research and analysis carried out by Amundi BI on the market for fund tokenization. It has been designed to help Amundi determine the current and future business opportunity related to tokenization techniques. The report builds on previous operational work conducted by various teams at Amundi on this topic, as well as on the sizeable research output produced by various third parties, database research and interviews with Amundi tokenization stakeholders and third-party tokenization ecosystem players.

The scope of the research is limited to the tokenization of fund shares, that is, using Distributed Ledger Technology (DLT) for the issuance, trading, settlement, recording and custody of fund shares or units. The research focuses on the potential revenues and cost reduction opportunities generated by the tokenization of funds managed by Amundi across the distribution value chain and does not address directly the portfolio management of tokenized assets. Market developments across the three main financial regions in Europe, Asia and North America were taken into consideration.

Data Sources

We relied on various data sources from desk & database research, direct interviews with Amundi tokenization stakeholders, contacts with company representatives from the tokenization ecosystem, market insights from tokenization conference attendance, as well as a survey of Amundi sales staff to develop a market view that reflects both our analysis and the general views of Amundi staff.

A full bibliography of the documentary sources and a list of all the people who were interviewed for this project are available at the end of this document. The interviewees' insights about tokenization—whether as experts on specific aspects of fund tokenization or as broader market observers of a rapidly evolving industry—were an important source of tokenization thinking and firmly anchor the content of this report in Amundi's reality.

Acknowledgements

Beyond the input received from all Amundi group staff, we thank all the representatives from various Amundi teams who provided us with guidance and information during the project's steering committee (J. Thakur, C. Djabarri, P. Carletto, S. Rougeron, S. Akhal, A. Martel, I. Chabannes, J. NG, T. Pietri, M. Keip).

We would like to thank in particular **Eddy Arnaud**, Amundi's Head of Product Marketing for France, for his valuable contribution to this report. As the project leader of one of Amundi's original tokenization initiatives, he was naturally one of the first people we reached out to when we began the project. His explanation, guidance, and information sharing allowed us to kickstart our work.

We extend our special thanks as well to **Anna Chiara Chisari** from the legal team of Amundi in Italy. Her extensive knowledge of the legal and regulatory landscape provided valuable reassurance as we navigated the rapidly evolving regulations surrounding fund tokenization. Chiara's participation in the tokenization working group of the European asset manager industry group EFAMA also gave us the opportunity to be exposed to additional external views on tokenization. Thanks for onboarding us.

It goes without saying that all errors in this report are the responsibility of its authors. We look forward to correcting them if necessary.

Project Team

This market research report is published by the Amundi Business Intelligence team headed by Claire-Anne-Perini. The project team leader for this report was Julien Laplante, with section-specific analyses and contributions from Amundi BI analysts Vivienne Zhou, Lucas Chomette, Romain Peretti, as well as the operational and editorial support from Paula Achim, Thomas Lefebvre, Noah Gaboriau and Inna Bassova.

3 Executive Summary: Beyond the Horizon Line

Fund tokenization, or the creation of a digital representation of an asset that can be registered and exchanged using Distributed Ledger Technology (DLT), has attracted significant attention over the past decade. This is no small feat for a technology that essentially addresses an unexciting aspect of the capital markets: the issuance and record keeping of fund transactions. This topic has recently received much attention, with a handful of asset managers launching tokenized share classes in Europe and Asia. Yet, such attention has hardly translated into real money so far. **Our best estimate of tokenized fund assets available on public blockchain today worldwide—essentially in money market funds managed by a handful of managers—hovers around $10 billion, a mere drop in the ocean compared to the €61.2 trillion mutual fund market. External market sizing estimates for 2030 put the tokenized fund market anywhere in between $300 billion to over $1 trillion by 2030.**

Yet, many market observers seem unfazed. Some industry analysts have gone as far as describing tokenization as a *"third revolution in the asset management industry"* (BCG 2024) after the second ETF revolution of the 1990s, or even further, as BlackRock's Larry Fink stated in his 2025 Letter, *"Every stock, every bond, every fund—every asset—can be tokenized."* Are these overstatements from a consultant priming their clients for more business and a media-savvy CEO looking for the next big thing? We set out to form our own view and concluded that, while **a revolution in the sense of a *"sudden, radical, complete change"* is not about to happen overnight, a more gradual transformation will likely take place progressively over the next ten years or so. It will be a revolution, but a slow-moving one, with digital, onchain investors as the revolutionary vanguard.**

A Bright New Future in the Making: A Potential Yet to be Realized

As of today, proponents of the technology highlight several benefits, including faster settlement and lower operational risks in post-trade operations, as well as facilitated fractional ownership, which offers clients greater accessibility to investment opportunities at a lower cost. These advantages could result in greater market liquidity and even larger capital markets, as more savings are converted into investments thanks to a larger investor base. Liquidity could be even further boosted through the creation of secondary markets via peer-to-peer trading. New use cases for institutional investors, including the use of tokenized fund shares as collateral in short-term financial operations, are often highlighted.

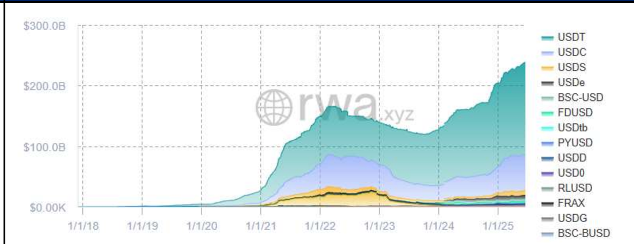
However, the promises of fund tokenization have so far been bridled by the legacy fund processing and capital market infrastructure, the development of digital currencies and their acceptance as a settlement method ("cash-on-cash" chain), as well as KYC concerns. **Yet, we believe that changes or intended changes to financial regulation aimed at accommodating the DLT technology such as regulators launching sandboxes and pilot regimes, the provision of digital currencies by private or public entities, as well as adaptation in historical capital market practices will ultimately enable these promises to be fulfilled.** With these enablers, the theoretical use cases of fund tokenization will then become increasingly a reality.

Along the current asset management fund servicing chain, various providers—including transfer agents, registrars, depositaries, custodians, distributors—will need to adapt or risk losing business. End investors, in particular in the retail space, will increasingly favor the fund providers and associated distributors that offer the fastest, most cost-effective, and efficient market access.

Distribution, Not Operation: The Digital Native Thesis

Yet, we believe that while operational efficiency gains and cost reduction through automation for the asset management industry are often presented as key advantages of fund tokenization, this perspective is inward-looking and overlooks the real consumer use case. Such operational factors are unlikely to be the main reason as to why tokenization takes off. On the contrary, as our market review suggests, the asset management and fund servicing industry will likely incur new costs as it deploys new tokenized distribution channels alongside the traditional offchain ones. **As a matter of fact, most tokenized funds we have seen so far did not come with sensibly lower fees than their offchain twin.**

Our positive fund tokenization thesis mostly relies on the growth of the digital native investors who will increasingly rely on digital assets as they initiate their journey in the investment and savings world. A good point of departure is the market capitalization of the two largest cryptocurrencies, Bitcoin and Ethereum, at over €2 trillion. Not bad for a market that was worth 0 back in 2008 at the time of Bitcoin's launch. The market capitalization of the two largest stablecoins, Tether's USDT and Circle's USDC, is about €200 billion. While the former are highly volatile, the latter do not pay any income. This leaves room for a middle ground that can be filled by tokens linked to managed portfolios. Tokenized funds from reputable asset management companies are one such options.

Market Capitalization of Cryptocurrency and Stablecoins	
Crypto Market Cap	Stablecoin Market Cap
	
Source: Coingecko	*Source: RWA*

In the end, changing investor usage will be the driving force behind this slow-moving revolution. **Onchain investors will eventually demand an entirely onchain experience. And like traditional offchain investors, they will want to diversify their portfolio, but without going back to the offchain world.**

Such a migration process will be gradual, with an acceleration likely to happen when traditional distributors—including banks, fund platforms and brokers—start incorporating digital assets directly into their offering and enable their clients to transact seamlessly using their digital wallet. The distribution of tokenized funds will then go beyond the limited channels of direct distribution by the fund manager itself or the distribution of specialized intermediaries with a limited market reach.

Only under such circumstances will a tokenized fund market of more than $1 trillion, as sometimes forecast beyond 2030, is probably realistic. Probably more realistic, but still highly optimistic, is a scenario where assets from tokenized funds reach approximately $300bn by 2030, which corresponds to Amundi BI's bullish scenario.

Market Size Projections and Revenue Opportunity Market Size Projections and Revenue Opportunity

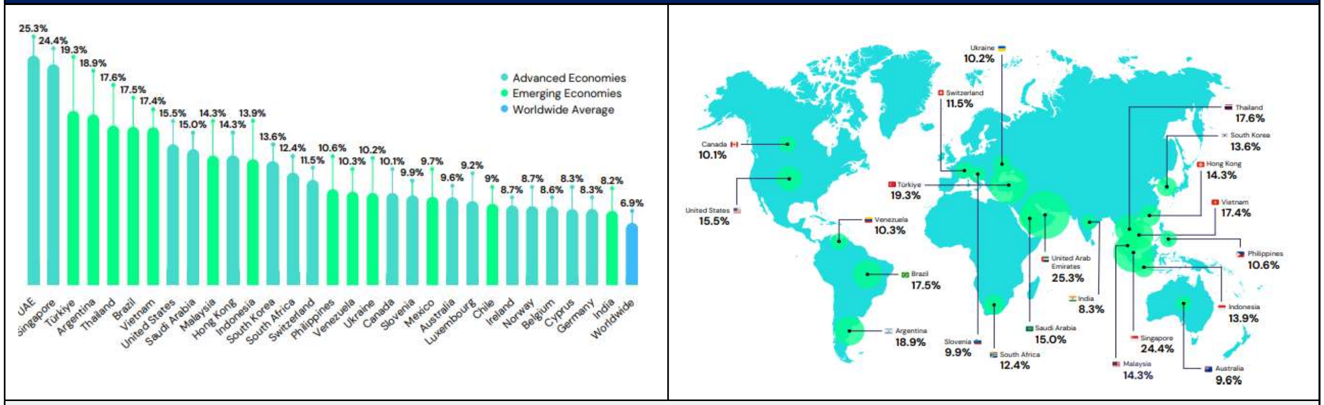
Source	Scenario	Tokenized AUM$ bn, 2030	% Global Mutual Fund Market	% Global Crypto Market	Net Revenue*, $bn (0,25% net revenue margin)	Net Revenue*, $bn (1,00% net revenue margin)
Amundi BI	1-Conservative	30	0,05%	1,10%	0,08	0,30
Amundi BI	2-Neutral	120	0,20%	4,41%	0,30	1,20
Amundi BI	3-Bullish	300	0,49%	11,03%	0,75	3,00
BCG	1-Conservative	600	0,98%	22,06%	1,50	6,00
BCG	2-Neutral	1000	1,64%	36,76%	2,50	10,00
BCG	3-Bullish	1300	2,13%	47,79%	3,25	13,00
McKinsey	1-Conservative	300	0,49%	11,03%	0,75	3,00
McKinsey	2-Neutral	600	0,98%	22,06%	1,50	6,00
McKinsey	3-Bullish	1200	1,97%	44,12%	3,00	12,00
	Average	**606**		*Average*	**1,51**	**6,06**
				Average	**3,78**	

Source : Amundi BI / BCG / McKinsey

Beyond 2030, depending on various factors, including the uninterrupted development of cryptocurrencies and other digital currencies, as well as the ongoing and consistent regulatory support from regulators worldwide, digital assets are likely to break the technical ceiling limiting them to the digitally native community and become a usual, non-exotic way of trading assets. At that point, growth in tokenized fund assets may gear up with offchain investors starting to invest directly in onchain assets as they become increasingly equipped with digital wallets—probably provided directly by their traditional offchain distributor.

In the short run, capturing such potential growth early certainly involves looking at where the digital wallets are located. According to recent analysis from Triple A, a crypto payment service provider, 562 million people worldwide own crypto, and Asia represents by far the largest market in terms of the numbers of crypto owners: 58% of crypto owners worldwide are found there for a total of 327 million people.

Top 30 Countries With the Highest Cryptocurrency Ownership Rate in 2024



Source: Triple A, Chainanalysis. Number of owners in millions.

Using a mix of tokenized fund market size from external market analysts and our own estimate of the market, **we evaluate the possible annual net revenue opportunity for the asset management industry at approximately $4bn by 2030, assuming that approximately half of the tokenized fund assets are invested in higher margin products, including private market funds.** By comparison, the net revenues of the asset management industry currently amount to approximately $310bn according to the BCG's Global Asset Management Report.

The Way Forward: Prepare Your DLT Operational Model

As the industry prepares for this evolution, various models have emerged to incorporate tokens into their product offerings. **With respect to technology, asset managers have to settle for either a private or public (e.g. Ethereum, Polygon) blockchain.** Most US and Asian experiences appear to have so far taken the public route. European ones appear have often been on the private side, generally in partnership with closed fund marketplaces (IZNES, FundsDLT, AllFunds) with a primary focus on improving the distribution operations, not reaching out to new clients.

Access to information about the private blockchain initiatives is much more limited, but anecdotal information points to the muted success of such projects, as they tend to trap the asset manager in an exclusive relationship with a single marketplace that limits its benefits both in terms of cost reduction and revenue generation.

The other important decision is about the operating model when tackling the business opportunity related to fund tokenization. Various models, each with various degrees of technological and commercial involvement, can be considered. These models, ranked from the least to most tokenization intensive, include:

1. **Delegation Model:** Portfolio management on behalf of a fund managed by a Web 3.0 fund management company (Spiko; Anemoy) or of an onchain asset issued by a DeFi players (BlackRock & Circle). The investment manager is not directly involved in fund tokenization but manages the asset portfolio of a tokenized fund from a third-party fund manager (Spiko), or the collateral reserve of an onchain financial instrument (Circle). More of a business opportunity linked to DeFi or onchain finance than about fund tokenization.

2. **Asset Backed Model:** Tokens are issued by a financial service company with a broker/dealer licence (e.g. Backed Finance; Swarm; OpenTrade; Archax) that is not the fund itself and that represents the property of fund shares that are registered to a nominee account in an offchain register.
3. **Hybrid Model:** Fund shares are issued in parallel offchain and onchain directly from a single, usually already existing offchain fund, using separate onchain registrar and transfer agents (e.g. IZNES, FundsDLT, CACEIS, Standard Chartered, Allfunds, etc).
4. **Native Model:** Fund shares are exclusively issued, registered, and traded via the DLT, and the fund has been designed consequently. In some cases, settlement can be performed using digital currencies. There will still be some of the operations carried out offchain, including sometimes the maintenance of an offchain register as well as the final trade settlement in fiat currencies using a conversion provider (on/off ramp).

Currently, there are only a handful of live, fully native onchain funds, with BlackRock, Franklin Templeton, Ondo Finance and Superstate accounting for nearly all of the US money market, and with Spiko for the Euro money market. China AMC has been the most visible funds in Asia with its HKD Digital Money Market Fund, available to retail investors, but has not provided a clear view of its asset raising so far.

For fully native onchain funds, setup costs will be higher and the potential to recoup the initial investments much tighter, as traditional distribution channels will be out of reach—for now. But they may also be the only way to tap into the digitally native, onchain market segment as these funds can generally be settled using digital currencies and are more aligned with the commercial and technical needs of onchain distributors.

For a large-scale, traditional asset manager, the launch of a tokenized share class under the hybrid model offers the possibility to dip its toes in the onchain world without a substantial investment. In the short-term, this may be the simplest and cheapest way to approach the subject and raise awareness of tokenization beyond the technical staff of an asset manager.

This hybrid approach, however, does not solve the distribution problems and even *potentially* limits the use of the blockchain potential at target notably with respect to the possibility to eventually settle using digital money instead of fiat currency, speeding up the entire settlement chain. The availability of a tokenized share class on a fund distribution platform does not guarantee asset raising, especially if the platform is not connected to onchain distributors, for technical reasons or others.

DLT Distribution Routes & Opportunities

In the short term, in terms of operational and distribution setup, an interesting business opportunity may be a partnership with a Web 3.0 asset manager looking for a traditional investment manager to manage the asset portfolio of its tokenized fund distributed to the investor in a true D2C setup. Whereas tokenization operations remain under the responsibility of the Web 3.0 fund manager, the traditional investment manager will get exposure to digital asset issuance gradually, up to the point where it might decide to launch its own native tokenized fund or tokenized share class under the hybrid model. This would probably be a sure way to associate a traditional asset manager to this new technology.

Other distribution routes for tokenized fund include **Direct Distribution (D2C)**, a route that has been taken by Franklin Templeton, as well as the **Direct Distribution Platform (B2C)** route, which can be taken by partnering with registered broker dealer such as Securitize in the US, OSL Securities in Hong Kong, ADDX in Singapore, or Archax in the UK. Blockchain-based distribution services provided by fund marketplace such as IZNES, FundsDLT and Allfunds **(B2B)** tend to operate within a closed environment, limiting DLT-based issuance and trading to the specific fund platform. This limitation reduces the appeal of issuing on these platforms due to concerns regarding interoperability.

Internal Organization: Revolution Needs Revolutionaries

In terms of internal organization, and regardless of the direction taken by the asset manager about fund tokenization, we note that various asset managers appoint a tokenization champion or project leader, whose job is to keep track of all initiatives with respect to fund tokenization.

Such professional acts as a point of contact for the various stakeholders in a tokenization process. Given the transversal nature of fund tokenization, which runs across the various functions of an asset manager and will eventually touch upon all strategies managed by an asset manager, such an appointment can bring some order to an asset manager's tokenization project.

We also note that such a champion may be necessary not only to raise awareness about fund tokenization, but also to identify the human and technical resources needed to gradually advance such projects over time (IT, Legal, Risk, Operations in particular). Such resources are unlikely to be readily available in any given organization willing to deploy tokenization as a new distribution tool. **The technical aspect of fund tokenization will likely require any asset manager developing this business to build an internal ecosystem of resources that will be blockchain-competent across its business lines and departments.**

A Medium-Term Play: The Cost of Missing Out

We believe that the endgame of tokenization will be a convergence between the onchain and offchain world. Faced by competition from onchain distributors or exchanges that will add tokenized financial assets to their product offering, traditional distribution networks—banks, asset managers, and distributors—will eventually develop onchain distribution capabilities on their own, creating a unified on/offchain framework. **At that stage, the industry will shift from a fragmented and constrained onchain distribution model to a more standardized, scalable, and interoperable distribution ecosystem for tokenized assets, with the potential to break the $1trillion mark and beyond.**

Asset managers that have prepared this digital offering by issuing fund tokens will have readily access to this market, which we believe will keep growing as an increasing supply of tokenized instruments encourages even more investors to move their investments and savings on-chain.

Legacy offchain asset managers that do not develop this offering will be at risk not only of losing ground to more agile and foreseeing legacy managers, but also of losing market share to “Web 3.0” asset managers. These newer players are more adept at using the blockchain technology and are naturally connected to the digital investor community, which is expected to drive initial growth.

In the end, whereas the revenues to be generated from tokenized funds in the *short term* may be underwhelming, **asset managers that look beyond the horizon line and that prepare for an onchain world that is already in the making may well end up on the winning side of the industry.**

4 Fundamentals: Making the Right Technological Decisions

In this section

Distributed Ledger Technologies (DLT), which have been utilized for financial purposes since the launch of Bitcoin in 2008, present various use cases for the tokenization of Real World Assets ("RWA")—essentially any financial or non-financial assets that exist off-chain.

The most discussed use cases include operational efficiency gain for an asset manager through automation thanks to smart contracts (fund administration; corporate actions; auditability; reporting; real time NAV), portfolio management (faster settlement and clearing, rebalancing, collateral use) and the ultimate distribution use case, an enlargement of the distribution scope (fractional ownership, higher trading frequency, transferability). **Yet, while fund tokenization holds significant promises, as demonstrated by various use cases, the current landscape is hindered by infrastructure gaps, limited market liquidity, regulatory challenges, and unclear business incentives, all of which constrain its broader adoption at this time.**

Beyond getting used to a new technological framework and vocabulary (DLT, blockchain, private & public blockchain, permissioning, whitelisting, smart contracts, native tokens, hybrid model, tokenization agent), asset managers wishing to enter the tokenization field have to make decisions, in particular with regard to the tokenization operational model (native vs non-native), as well as the use of a private or public blockchain.

Throughout our sample of case studies, we observed a mixed distribution between the **use of private blockchains, which appear to be more prevalent in Europe**, and **public blockchains, which are more common in the United States**. Whereas asset managers appear to have used private blockchains to launch their first tokenised funds, sometimes in a sandboxed environment, we note an increase in the use of public blockchains by asset managers.

4.1 DLTs, Blockchains, Fund Tokens & Digital Wallets

Distributed Ledger Technology (DLT) enables databases to be stored in a trusted, verifiable, accessible, and decentralized manner. Unlike traditional centralized databases or ledgers, which are maintained by a single entity and are only as robust and resilient as the infrastructure of their central administrator (often referred to as the "*central point of failure*"), distributed ledgers consist of a single decentralized ledger that is distributed across various entities (i.e., computers or "*nodes*").

In centralized ledgers, users must trust the party maintaining the central ledger and reconcile their own databases against it. In contrast, DLTs eliminate this requirement, as all users see the same ledger. Through an algorithmic consensus mechanism, the ledger is updated by a group of "nodes" (computers) that are disincentivized from acting as "bad actors" behaving dishonestly, for instance by trying to manipulate transactions, conducting attacks like a 51% attack, Sybil attack, or DDoS attack, or trying to gain unauthorized access to private keys or digital wallets.

Blockchains, which are often used interchangeably with DLT, is a category of DLT. Blockchains record transactions and data across a network of participants with multiple computers in a way that ensures the data is secure, transparent and immutable. In the case of blockchain, each transaction is stored in a block and these blocks are linked in a chain. A blockchain is effectively a transparent time-stamped ledger. Anyone, or at least any authorised person in a permissioned blockchain, can view in real time the transactions registered in a public blockchain.

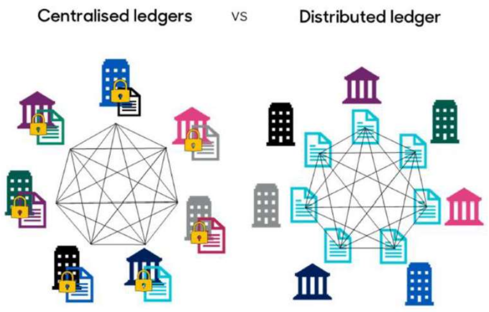
In the financial world, **using Distributed Ledger Technology (DLT) changes how shareholder registers are managed**. Traditionally, a centralized shareholder register is maintained by one party—either the issuer under the Transfer Agent model or a central depository under the Central Securities Depository (CSD) model. This centralized register requires multiple databases maintained by different participants in the fund's value chain, which then need to be regularly reconciled.

With DLT, this centralized system is replaced by a single, shared ledger. This ledger is accessible to all stakeholders involved in the fund's post-trade process, allowing everyone to see trade information in real time. This eliminates the need for multiple reconciliations and improves transparency and efficiency.

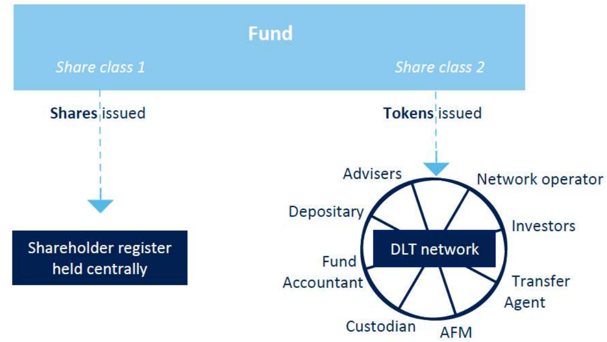
Smart contracts, which are sets of self-executing rules embedded directly within certain blockchains, enable the automation of various time-consuming tasks related to compliance and operations. In the words of the Bank of International Settlements (2023), smart contracts are *"self-executing applications of programmable platforms that can trigger an action if some pre-specified conditions are met."*

When applied to fund tokenization, a smart contract can automate and enforce the terms and operations of a tokenized investment fund. It encodes investment terms, portfolio management rules, corporate actions (such as dividend distributions), regulatory compliance requirements, and transaction processes. When predefined conditions are met—such as changes in market conditions or investor actions—the smart contract automatically executes the relevant transactions and administrative tasks, potentially enhancing operational efficiency. **This increased efficiency may allow fund servicers and managers to process smaller trades, particularly in resource-intensive areas of the financial markets, such as private markets.**

Figure 1 Centralised vs Distributed ledger



Source: IMMFA White Paper on Tokenisation of Money Market Funds 2025 02



Source: Tokenised funds series Paper 1 – What, why and how (UK IA) 2020 11

Accordingly, a blockchain-based DLT is the infrastructure on which a token is issued and exchanged in the onchain world. The technology enables a token to be issued, recorded and transferred across various account holders in a secure way.

In the fund world, a **Token** digitally represents the rights associated with a share or units issued by an investment fund such as a mutual or private fund. Fund units, which are fungible, are represented by **fungible tokens** in the digital world.

Fund tokens can be bought, sold, or transferred in both **primary** and **secondary** markets. In the **primary market**, a fund issuer can either *mint* (issue) or *burn* (redeem) the token. In the **secondary market**, transactions can occur through peer-to-peer trading (generally through a decentralized exchange) or order book-based trading. Ownership, transactions, and records are maintained on the blockchain ledger, with the token property registered to the owner of a **digital wallet**, effectively replacing the traditional book-entry system for financial securities accounts.

When trading, this digital wallet can be identified on the blockchain through its **public key**. Access to the wallet can be granted solely to the owner (self-custody) or to an intermediary acting on behalf of the owner, using a **private key** that corresponds to the wallet's password. **Fungible fund tokens can be issued across multiple blockchains simultaneously, commonly achieved through cross-chain or multi-chain deployments.**

While fund tokens can be deployed on decentralized infrastructure, they inherently remain centralized instruments, with a single issuer and a registrar and transfer agent (TA) responsible for maintaining the register. **The TA, which may utilize shared ledger technology or not**, controls who can hold and transact the tokens and manages smart contract functions such as minting and burning. This control is typically achieved by deploying security tokens on **private DLT networks** that are accessible only to authorized participants or by using **permissioned tokens** with smart contracts that restrict transactions and functions to whitelisted addresses. This token-level control allows for greater flexibility and even enables security tokens to be deployed on public blockchains.

4.1.1 Public vs. Private Blockchains

Blockchains can be broadly categorized into **public and private** blockchains, each with distinct characteristics and use cases. **Public blockchains** are open networks accessible to anyone who wishes to participate, allowing any member of the public to access data and initiate transactions on the ledger. Despite this openness, the data on public blockchains is immutable, meaning that once a transaction is recorded, it cannot be altered. **Public blockchains, while more decentralised, pose challenges like high volatility in transaction fees, transparency risks, and limited compliance tools—making them less suitable for traditional finance applications.**

Public blockchains can be classified as **permissionless** as fully open networks with no restrictions on participation, or **permissioned**, where they remain open but impose restrictions on node operation and asset access, providing greater control and security. **Examples** of **public blockchains** include **Bitcoin** and **Ethereum**, where anyone can view transaction data and participate in the network. Other notable public blockchains include **Polygon**[1] and **Avalanche**[2].

In contrast, **private blockchains** restrict access to authorized participants only. These networks are not open to the general public, and access rights can be tiered, allowing different participants to have varying levels of authority to view or initiate transactions. This hierarchical structure provides greater control and privacy, as only certain nodes can read or write to the ledger. **It makes it easier to enforce KYC/AML rules, protect investor data, and comply with privacy regulations like GDPR**. They also provide a secure environment for managing investor eligibility, smart contract governance, and fund operations, which is crucial for regulated financial products. **This controlled infrastructure reassures both regulators and institutional investors, facilitating smoother integration with existing financial systems and custodians.**

Private blockchains often do not require complex consensus mechanisms, such as proof of work, because transaction validation is managed by a trusted third party or a consortium. Private blockchains offer operational efficiency and flexibility. With faster transaction processing, lower costs, and the ability to customise fund features (like lock-up periods or distribution rules), they support more scalable[3] and secure fund tokenisation. **This setup enhances privacy and operational efficiency but reduces the openness and decentralization characteristic of public blockchains.**

[1] Polygon is a layer 2 solution on Ethereum that operates as a public and permissionless blockchain, offering advanced wallet features, increased accessibility, and lower transaction fees.

[2] Avalanche is a public, permissionless blockchain known for its low transaction fees and high throughput, making it suitable for tokenizing assets and supporting decentralized applications.

[3] Blockchain scalability refers to the ability of a blockchain network to handle an increasing number of transactions efficiently without compromising security or decentralization.

Figure 2 Use Cases by Blockchain Type

Use Case	Best Fit
Retail distribution of tokenised funds	Public blockchain
Private placement among institutions	Private blockchain
Real-time compliance in regulated sandbox	Private or hybrid
Global fund passporting with digital wallets	Public blockchain
Internal operational efficiency (e.g., fund NAV, shareholder registry)	Private blockchain

Source: Amundi BI

Examples of private blockchain providers include **JP Morgan's Kinexis**, **Allfunds Blockchain**, and the **IZNES** blockchain. Other examples of private permissioned distributed ledger technologies (DLTs) include Digital Asset's Canton Network and R3 Corda. These private blockchains require authorization for access and are typically utilized by enterprises to ensure security, privacy, compliance, and performance within a closed ecosystem.

Figure 3 Public VS Private Blockchain Comparison

Aspect		Public Blockchain	Private Blockchain
Network Access & Participation			
	Access	Open to anyone; no permission needed	Permissioned; only approved participants can join
	Control	Decentralized — no central authority	Centralized or consortium-controlled
	Example	Ethereum, Polygon, Solana	Hyperledger Fabric, R3 Corda, ConsenSys Quorum
Security & Trust			
	Security Model	High — maintained by a large number of nodes (trustless)	Lower — fewer nodes; depends on internal security
	Transparency	Fully transparent; all transactions public	Transactions are private and visible only to authorized parties
	Trust	Based on code and consensus	Based on pre-established legal/trust relationships
Transaction Speed & Scalability			
	Speed	Often slower due to global consensus mechanisms	Much faster due to controlled environment
	Scalability	Limited (but improving with Layer 2s)	High scalability tailored to specific needs
Regulatory Compliance			
	Compliance Enforcement	Complex — requires smart contract enforcement and legal overlays	Easier — compliance rules are embedded at the network layer
	Auditability	Full public auditability	Restricted but customizable auditing features
	Jurisdiction	Global, hard to localize	Easier to align with specific jurisdictions (e.g., EU AIFMD, HK SFC rules)
Cost & Infrastructure			
	Transaction Costs (Gas Fees)	Variable and potentially high	Low or negligible
	Setup Cost	Lower upfront (infra is already there)	Higher upfront (requires building the network)
	Operational Cost	Can be unpredictable (based on gas market)	Predictable and controllable cost structure
Customisation & Interoperability			
	Smart Contract Customisation	High, but must meet public security standards	Very high; bespoke contracts for specific partners
	Integration with Ecosystem	Broad — access to wallets, oracles, stablecoins, DeFi	Narrow — requires custom integration with existing systems
	Interoperability	Emerging via bridges and standards	Easier within consortium but siloed from public networks
Investor Access & Liquidity			
	Retail Access	Possible (subject to KYC gating)	Typically restricted to institutional or pre-approved investors
	Liquidity	Potential Higher — integration with public exchanges, DeFi, token bridges	Lower — closed ecosystem with limited trading venues
	24/7 Market	Yes	Often limited to business hours or custom policies

Source: Amundi BI

Throughout our sample of case studies, we observed a mixed distribution between the **use of private blockchains, which appear to be more prevalent in Europe**, and **public blockchains, which are more common in the United States**. Whereas asset managers appear to have used private blockchains to launch their first tokenised funds, sometimes in a sandboxed environment, we note an increase in the use of public blockchains by asset managers.

Amundi Business Intelligence
business.intelligence@amundi.com

In particular, high-profile traditional asset managers such as BlackRock and Franklin Templeton adopted permissioned public blockchain models for their tokenised offerings. According to the annual ISSA "DLT in the Real World", the public and permissioned public blockchain planned projects accounted for 65% of the DLT projects in 2025, up from 40% in their 2022 survey, with the share of private blockchain falling the most for the "investor" segment, which includes asset managers.

Figure 4 Planned Blockchain type for Projects in 2025

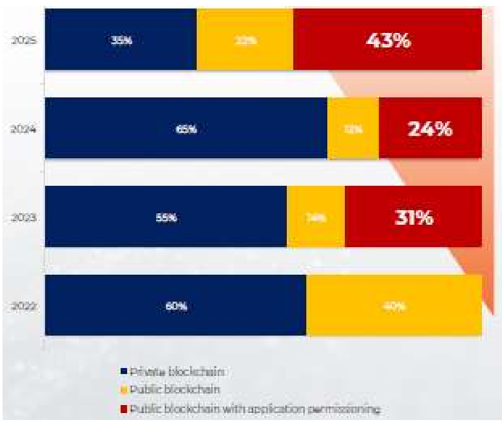
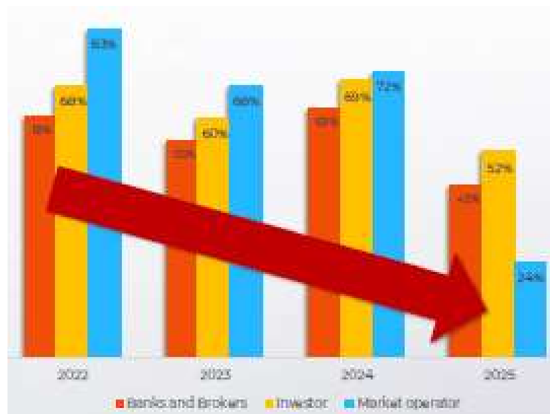
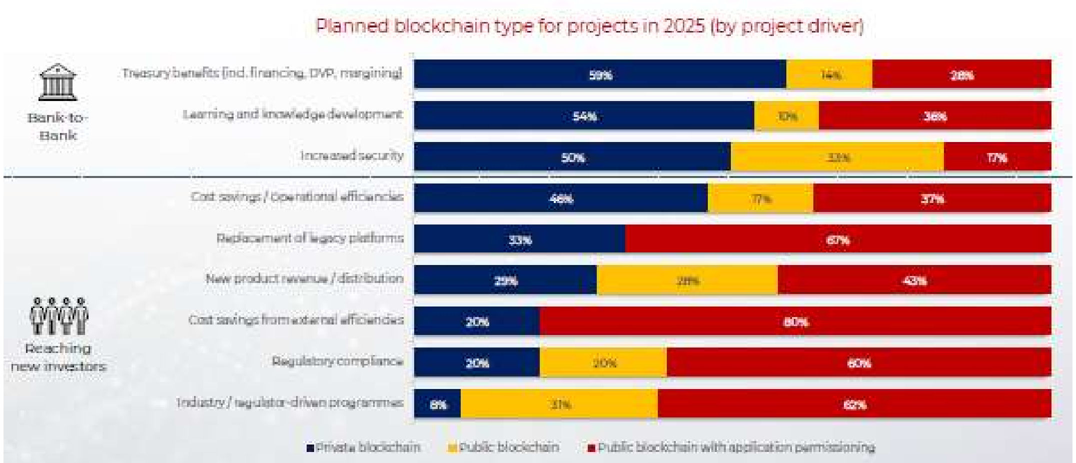


Figure 5 Use of Private Blockchains by Segment (% of Respondents)



Source: DLT in the Real World 2025 (The Value Xchange)

Figure 6 Planned blockchain type for projects in 2025 (by project driver)



Source: DLT in the Real World 2025 (The Value Xchange)

4.1.2 Native vs Non-Native Tokenization

Tokens can be issued directly and exclusively by the fund using a blockchain, in which case they are referred to as **native tokens**. This means that the only way to invest in the rights associated with this fund is to purchase the token itself. Alternatively, tokens can be **non-native**, where the financial instrument is available both off-chain, through traditional subscription methods, and on-chain, utilizing Distributed Ledger Technology (DLT), typically a blockchain. In this scenario, the issuer creates a "digital twin" of the original shares that are issued and registered on a traditional off-chain ledger.

Native fund tokens are those issued directly on a DLT platform, representing ownership or claims inherently tied to the blockchain itself. **Creating these native tokenized fund vehicles can be relatively straightforward, but they often require attracting a new pool of investors who are comfortable engaging with blockchain-based assets.** These tokens are typically associated with new fund structures specifically designed for tokenization.

In contrast, **non-native tokens**, sometimes referred to as digital twins, serve as digital representations of physical or existing assets that were originally issued outside the blockchain environment. Often created through Security Token Offerings (STO), this approach mirrors existing fund structures and can be implemented more quickly. However, managing non-native tokens involves handling dual operations—both traditional and blockchain-based—which adds complexity and expense. This method allows existing funds to be converted into tokenized versions, offering scalability benefits but requiring careful management to avoid operational disruptions.

In essence, while native tokens are blockchain-native fund vehicles that may necessitate building a new investor base, non-native tokens digitally represent existing funds, enabling faster implementation but with added operational challenges.

Figure 7 Non-Native vs. Native Tokenized Funds

	Non-Native Tokenized Funds	Native Tokenized Funds
Definition	A traditional investment fund is created and managed off-chain (outside the blockchain), and a digital representation or "mirror" of fund shares or units is issued as tokens on a blockchain.	A fund created natively on the blockchain, where the token itself is the legal share/unit in the fund and all operational processes (subscriptions, redemptions, NAV calculation, compliance checks) are automated via smart contracts.
Key features	• Underlying legal structure remains unchanged: The fund is governed by traditional fund laws (e.g., UCITS, 40 Act Fund, etc.). • Tokens are wrappers: They act as representations of fund ownership but are not the primary record of ownership. • The official register is still maintained by a transfer agent or custodian off-chain. • Blockchain adds value in distribution and settlement, not fund governance.	• No parallel off-chain structure—the fund shares legally exists only on-chain. • The investor registry and transfer history are recorded on the blockchain. • Smart contracts manage fund logic: NAV updates, investor redemptions, fee payments, etc. • Requires a jurisdiction where fund shares can legally exist in Tokenized form.

Advantages	• Easier regulatory compliance (treated as traditional fund).
	• Faster implementation and compatibility with existing infrastructure.
	• Improves transferability and secondary market potential.
	• Compatible with existing infrastructure.
	• Leverages current distributor relationships.
		• Potential:
		  ◦ *Full automation and transparency.*
		  ◦ *Instant settlement and reduced need for intermediaries.*
		  ◦ *Fractional ownership, programmable compliance, and 24/7 trading.* *Lower distribution costs (fewer intermediaries).*
		  ◦ *Instant investor onboarding and settlement.*
		  ◦ *Global investor access (subject to programmed compliance).*
		  ◦ *Real-time transparency and auditability.*

Limitations	• Limited automation of fund operations. • High cost due to intermediaries. • Long processing times (manual, batch processes). • Limited investor transparency or automation.	• Complex legal structuring and regulatory uncertainty. • Investor protections and AML compliance can be harder to enforce. • Requires new digital-native fund infrastructure.
Model	• Fund units are issued traditionally (e.g., via registrar/transfer agent). • Tokenization is only applied as a wrapper for record-keeping, secondary trading, or improved settlement. • Fund distribution (marketing, onboarding, KYC/AML, settlement) happens via intermediaries (e.g., platforms, IFAs, custodians, banks).	• The fund is issued natively on the blockchain; tokens are the legal representation of ownership. • Distribution is embedded into the smart contract logic, enabling direct-to-investor models or decentralized distribution.
Operational Features	• Investor onboarding: Manual via distributors or platforms. • KYC/AML: Performed by distributors and TA; not blockchain-native. • Subscriptions/redemptions: Through TA, processed on T+1 to T+3 basis. • Recordkeeping: Maintained off-chain, even if Tokenization exists for transferability. • Compliance: Enforced by humans or systems off-chain.	• Investor onboarding: On-chain via whitelisted wallets, automated KYC/AML via identity oracles. • Subscriptions/redemptions: Near-instant and automated using smart contracts. • Compliance: Programmed into token logic (e.g., only eligible wallets can hold or trade tokens). • Recordkeeping: Blockchain acts as the single source of truth. • Secondary trading: Enabled via regulated digital asset exchanges or permissioned DEXs.
Distribution Channels	• Fund platforms (Allfunds, Fundsquare, Calastone) • Banks and financial advisors • Wealth apps	• Direct-to-investor via fund websites and wallets. • Token marketplaces (e.g., Securitize, ADDX, DigiFT). • Potential future role of decentralised finance (DeFi) protocols.

Source: Amundi BI

4.1.3 Cybersecurity Concerns

Cybersecurity concerns regarding the issuance of fund tokens on a blockchain stem from several factors inherent to the technology and its operational environment. While blockchain is designed as a secure, immutable, and distributed ledger, the broader ecosystem surrounding tokenized funds introduces vulnerabilities that necessitate careful consideration and robust safeguards when issuing fund tokens on blockchain platforms.

One key issue is the reliance on private keys for access and control. If a private key is lost or stolen, access to the associated tokens can be permanently lost or compromised. **Due to the decentralized nature of blockchain, there is often no central authority to recover or reset access, creating significant risks for both investors and fund managers.** Maintaining a physical share register, as traditional funds do, would undermine the purpose of decentralization. Regulators may be concerned about ensuring that retail investors do not lose any record of or means of access to their investments or tokens, which could pose additional operational risks when considering the practical application of tokenized funds.

Additionally, smart contracts, which automate functions such as interest payments or ownership transfers, present another potential attack surface. Bugs or vulnerabilities in smart contract code can be exploited by hackers, potentially leading to unauthorized transactions or loss of assets. Unlike traditional systems where human discretion can intervene, smart contracts execute automatically and inflexibly, which can exacerbate the impact of any security flaws.

The decentralized and permissionless nature of many blockchains also raises governance and accountability challenges. It can be unclear who is responsible if something goes wrong—whether it is the fund managers, the developers who wrote the code, or the network validators. This ambiguity complicates incident response and legal recourse. Furthermore, the decentralized nature of DLT raises questions of accountability and liability, which remain largely unresolved and may cause concern for regulators and potential investors. In traditional systems, there is typically a clear party to approach for resolution or to make a claim against.

Moreover, public blockchains are open to all participants, including malicious actors. While cryptographic techniques secure transactions, the network and associated infrastructure can still be targeted by cyberattacks, such as phishing, wallet hacking, or denial-of-service attacks.

Figure 8 Key Cybersecurity Risks and Challenges

Cyber Threat	Description
Vulnerability to Attacks	Blockchain networks and smart contracts can be targeted by various cyberattacks such as 51% attacks, Sybil attacks, DDoS attacks, phishing, hacking, and exploitation of smart contract vulnerabilities, potentially leading to asset theft or operational disruption.
Private Key Risks	Access to tokenized assets depends on private keys. Loss, theft, or compromise of these keys can result in permanent loss of assets, as decentralized systems typically lack centralized recovery mechanisms.
User Familiarity and Fraud	Clients may be unfamiliar with managing wallets and keys, increasing the risk of fraud, deception, and errors in transactions.
Smart Contract Risks	Smart contracts, being code-based, can have bugs or be exploited, leading to unexpected outcomes, financial losses, or operational failures.
Data Security	Investor data related to tokenized assets can be targeted, risking unauthorized exposure of sensitive information.
Operational and Regulatory Risks	Cyber incidents can cause financial losses, regulatory penalties, reputational damage, and raise concerns about accountability and liability in decentralized environments.
Complexity and Cost	Managing cybersecurity in tokenized funds requires specialized technology, regular security audits, and potentially costly digital custodians to safeguard keys.

Source: Amundi BI

4.1.4 KYC Concerns

Know Your Client (KYC) processes for tokenised funds share the same core objectives as traditional fund KYC: verifying identity, assessing risk, and preventing illicit activities (e.g. money laundering, terrorism financing). **However, the methods and context differ, due to the digital and decentralized nature of tokenised assets.**

KYC for tokenised funds introduces several process enhancements that leverage digital technologies to improve onboarding and identity verification. These include digital onboarding through Web3 wallets, biometrics, and e-signatures, as well as on-chain identity verification using decentralized identifiers (DIDs). Zero-Knowledge Proofs (ZKPs) enable identity verification without revealing full personal data, while token whitelisting ensures that only wallet addresses passing KYC can receive fund tokens. KYC processes may be embedded directly in smart contracts or delegated to external KYC providers or oracles.

Compared to traditional funds, tokenised funds offer distinct advantages such as digital-first, wallet-based identity verification, onchain wallet address whitelisting for access control, and the potential for KYC portability across platforms using DIDs. These innovations can reduce onboarding costs and time, preserve investor privacy through ZKPs and DIDs, and provide immutable, on-chain audit trails, contrasting with the manual, paper-based, and centralized processes of traditional funds.

However, KYC for tokenised funds also presents unique compliance and enforcement risks if not properly designed. The pseudonymous nature of blockchain wallets can facilitate illicit activities like sanctions evasion and terrorist financing without robust KYC layers. Decentralised platforms and smart contracts may create regulatory gaps if KYC is not integrated at the protocol level, raising questions about accountability.

A critical issue in this space is **the lack of a robust digital identity framework**. Fund managers are responsible for verifying potential investors and ensuring the legitimacy of their backgrounds and funding sources. This process remains fragmented, heavily reliant on documentation, and often time-consuming. **Although digital identification solutions exist for retail investors, their adoption within the funds industry has been inconsistent. Additionally, there are concerns about whether these digital identity solutions fully comply with Money Laundering Regulations, adding another layer of complexity.**

Additionally, the lack of uniform regulation across jurisdictions increases the risk of non-compliance or retroactive penalties. The technological complexity of new tools such as DIDs and zero-knowledge KYC can lead to operational failures or exploitation if poorly implemented. **Furthermore, the peer-to-peer trading of tokenised fund shares on unregulated secondary markets can break the chain of compliance, allowing unvetted parties to enter the fund ecosystem.** These challenges highlight the need for careful design and regulatory alignment to harness the benefits of tokenised fund KYC while mitigating associated risks.

4.1.5 Digital Currencies

Digital currencies are forms of money that exist electronically and that can be used for transactions on digital platforms, often leveraging blockchain or distributed ledger technology. They encompass various types, including cryptocurrencies like Bitcoin and Ethereum, private monies including stablecoins such as USDC and Tether, and central bank digital currencies (CBDCs) like the ongoing initiatives for a digital euro, e-HKD, and digital yuan. These digital currencies can represent cash or cash equivalents on a blockchain, enabling seamless, programmable, and instant transactions without the need for traditional intermediaries.[4]

The settlement of fund trades using digital currencies has the potential to drive growth in the fund tokenization market by addressing several inefficiencies inherent in traditional fund settlement processes. Traditional settlements often involve multiple intermediaries, lengthy settlement times (such as T+2 or T+3 days), and operational complexities that lock up capital and expose investors to market and counterparty risks. By utilizing digital currencies, particularly those that are "cash-on-chain," such as CBDCs or stablecoins, fund transactions can settle atomically and instantly on the blockchain. Under atomic settlement, the exchange of fund tokens for payment tokens

[4] For a good overview of digital currencies, please see Annual Economic Report 2023 III. Blueprint for the future monetary system: improving the old, enabling the new

occurs simultaneously and irreversibly, which reduces settlement risk and frees up capital more quickly.

Moreover, digital currencies facilitate programmable money features, enabling the automation of compliance checks, real-time reporting, and enhanced transparency. This streamlining reduces operational costs and complexities for both fund managers and investors. The ability to settle trades instantly and securely on blockchain networks also opens up possibilities for secondary markets in fund tokens, increasing liquidity and investor access.

Examples of funds that can settle in digital currencies include **Franklin Templeton's money market fund**, launched in 2021, which distributes tokens on public blockchains like Ethereum and Polygon, allowing these tokens to be used directly as collateral without needing to convert to cash. Additionally, **BlackRock's BUIDL fund facilitates settlement in digital currencies through its integration with Circle's USDC stablecoin**. This fund operates on the Ethereum public blockchain and utilizes a smart contract-controlled USDC liquidity pool, enabling near-instant, 24/7/365 real-time conversion between BUIDL tokens and USDC on a one-to-one basis. This setup allows investors to convert their BUIDL fund tokens directly into USDC stablecoins and vice versa, effectively enabling the settlement of trades in digital currency.

4.2 Fund Tokenization Ecosystem Target Model

The primary distinction between stakeholders in traditional investment funds and those involved in fund tokenization lies in the significant presence of technology providers within the latter ecosystem. While traditional funds rely on conventional intermediaries such as fund managers, depositaries, and distributors to manage operations, the development and management of tokenized funds depend on various types of technology solution providers. The provision of technology services is often outsourced to third-party providers.

These third-party providers may offer entirely new services specifically related to the tokenized nature of a fund, such as the role of a tokenization agent. Alternatively, they may provide onchain extensions of services that were already offered by traditional, offchain service providers. This includes services such as the custody of an investor’s fund assets, KYC (Know Your Customer) services, transfer agent (TA) and registrar services as part of the distributed ledger, as well as distribution services.

Figure 9 Fund Tokenization Target Model			
Role / Entity	Description	Onchain Responsibilities / Interaction	Key Tools / Examples
Fund Manager	Designs and manages the investment strategy of the tokenised fund.	• Deploys the smart contract governing the fund. • Initiates token issuance, often representing fund shares/units. • Sets fund parameters (NAV frequency, redemption rules, etc.). • Interacts with compliance layers (e.g., KYC providers, oracles).	Key Tool: Smart contract platform (e.g., Ethereum, Polygon, Avalanche)
Investors	Acquire and hold tokenised fund units.	• Access the fund via a digital wallet (e.g., MetaMask, WalletConnect). • Undergo on-chain KYC through whitelisting before purchase. • Transact using stablecoins or crypto-native payment rails.	Note: Wallet must be compliant (whitelisted).
Tokenization Agent	Builds the onchain infrastructure, creates the fund tokens	• Develops smart contracts for issuance, transfers, redemptions. • Integrates compliance rules directly into code (e.g., investor whitelist). • Ensures token standards (ERC-20, ERC-1400, etc.) are respected.	Eg. Tokeny, ConsenSys Codefi, Fireblocks, Chainalysis (compliance), Internal offering of various custodians
Identity Oracle	Validates investor identities and eligibility.	• Performs off-chain or on-chain KYC and AML screening. • Issues a "proof of identity/eligibility" to the wallet (e.g., via token or whitelist entry). • Enables geographic restrictions, investor types (retail/professional).	Key players: Sumsub, Fractal ID, Blockpass, VerifyVASP
Custodian	Safeguards the digital tokens representing fund ownership for investors.	• Manage private keys securely using multisig wallets, cold storage, and other security measures. • Provides interfaces for transaction approvals. • Offers reporting and regulatory compliance.	Key players: Fireblocks, Copper, BitGo, Taurus, Anchorage
Transfer Agent / Registrar	Maintain the register of token holders and manage ownership records on the blockchain.	• The blockchain ledger itself replaces traditional TA. • The smart contract tracks all transfers and redemptions. • Compliance logic restricts unauthorized transfers.	
Payment & Settlement Layer	Facilitates subscription and redemption payments.	• Investors transfer tokenized cash (e.g., USDC, EURS, tokenized bank deposits). • Settlement is instantaneous and atomic (delivery vs payment). • Redemption can be automatic via smart contract triggers.	
Onchain Marketplace / Exchange	Facilitates secondary market trading of fund tokens.	• Lists compliant fund tokens for eligible participants. • Enables peer-to-peer or order book-based trading. • Enforces transfer restrictions through token compliance logic.	ADDX, Securitize Markets, DigiFT, INX, Archax
Regulator / Regulatory Node (future vision)	Oversight and compliance enforcement.	• Regulatory nodes could monitor transactions in real time. • Automated reporting through on-chain event logging. • Enforcement through programmable compliance (e.g., no secondary trading without proper license).	

Source: Amundi BI

4.2.1 Fund Manager: Target Benefits & Limitations

The Fund Manager is responsible for designing and managing the investment strategy, deploying the governing smart contract, initiating token issuance, and setting fund parameters such as net asset value (NAV) frequency and redemption rules. They also interact with compliance layers, including KYC providers and oracles, typically using smart contract platforms such as Ethereum, Polygon, or Avalanche.

In contrast to a traditional offchain fund operation, the fund manager must deal with various providers of technology solutions that are intermeshed with DLT processes, including the tokenization agent, the identity oracle, as well as all the traditional fund services delivered onchain.

For fund managers, **the advantages of DLT-based fund distribution** are numerous and extend benefits to various actors in the value chain. One key opportunity lies in the potential for growth in Assets under Management (AuM). **Beyond the primary market issuance of fund shares, tokenization may facilitate secondary market trading, including for semi-liquid and illiquid assets, creating an ETF-like operating model.** This approach could attract more investors and distributors, streamline operations, and provide a competitive edge against traditional ETFs. It also supports faster transactions and settlements, enhancing transparency in collateral ownership, although this potential is currently realized only to a limited extent.

From an operating model perspective, tokenization enables innovation by potentially streamlining collateral management and offering a robust alternative to cash collateral. It creates a single source of truth for fund holdings, reduces operational risks through the inherent security of blockchain, and improves efficiency by minimizing reconciliation friction across the value chain. Additionally, it potentially allows for 24/7 ownership transfers, including outside standard business hours, and has the potential to simplify KYC documentation sharing.

In terms of settlement, DLT-based models can reduce settlement times to T+1 or even T+0, compared to the traditional T+2 or T+3 cycles. The use of digital wallets and cryptocurrencies shortens settlement cycles and minimizes counterparty and settlement risks, although full realization depends on the availability of Central Bank Digital Currencies or tokenized money market funds as cash equivalents.

Cost efficiency is another advantage, especially in markets with complex, multi-layered distribution models. Tokenization could enable a "register model," reducing transaction costs and the number of distinct share classes, leading to overall cost savings.

However, several challenges remain. A significant obstacle is the unclear business case, with many asset managers lacking specialized resources to manage the tokenization value chain, facing limited market appetite, and struggling with transitions from legacy systems. Technologically, many management companies rely on third-party ICT providers and may lack the in-house expertise or willingness to invest heavily in internal systems, necessitating partnerships with technology providers.

Risk considerations include compliance with frameworks like DORA, increased cybersecurity risks, and the time and investment required to achieve economies of scale and build a sufficient investor base. Cost concerns involve the expenses associated with setting up parallel systems for tokenized share classes, digital custodianship fees, and the challenges of expanding 24/7 trading capabilities.

Finally, regulatory and AML/KYC requirements remain critical. Blockchain does not eliminate these obligations, which must be managed onchain to maintain compliance. Moreover, fund distribution will continue to rely on specialized intermediaries to fulfill regulatory duties and serve diverse client needs, meaning that while blockchain reduces some intermediation, it does not remove it entirely.

4.2.2 Investors: Target Benefits

Investors in tokenized funds acquire and hold fund units through compliant digital wallets (e.g., MetaMask, WalletConnect), undergoing on-chain KYC whitelisting before making purchases and transacting using stablecoins or crypto-native payment rails. In contrast, traditional investors interact through brokers, platforms, or banks, where onboarding and KYC processes are often manual and time-consuming. Digital custodians in the tokenized ecosystem safeguard assets by holding private keys and providing transaction approval interfaces, while traditional custodians manage physical or electronic certificates and maintain custody through centralized systems.

For investors, there are three main streams of benefits. **First**, in terms of access to investment, tokenization offers a faster, less cumbersome, and more digital solution for investing. It broadens accessibility to a wider range of products, including semi-liquid investment vehicles, by enabling fractional ownership of shares. This also opens up access to asset classes that were previously unavailable to retail investors due to high entry tickets or lot sizes.

Second, from a technology perspective, assuming the appropriate technology and models are deployed, tokenization can provide greater transparency without compromising confidentiality. Additionally, onchain settlement can enable the fastest execution and settlement times, significantly shortening the overall transaction process.

Third, regarding investor data and KYC, tokenization allows for a more streamlined approach to AML and KYC practices while remaining compliant with relevant regulations. Once an investor’s data is set up on the blockchain, it remains accessible and enables automated checks for each subsequent transaction, enhancing efficiency.

Finally, regarding costs, once the blockchain wallet setup is complete and operational for an investor, they may benefit from lower execution costs, making the investment process more economical over time.

4.2.3 Tokenization Agent

Tokenization agent builds the onchain infrastructure by developing smart contracts for issuance, transfers, and redemptions, integrating compliance rules directly into the code, and ensuring adherence to token standards like ERC-20 or ERC-1400. Providers such as Tokeny, ConsenSys Codefi, Fireblocks, and Chainalysis offer compliance solutions. In traditional funds, these functions are handled by multiple intermediaries, including registrars, transfer agents, and compliance officers, which can introduce inefficiencies and manual errors.

4.2.4 Identity Oracle

An identity oracle is a specialized type of oracle[5] in a distributed ledger technology (DLT) or blockchain network that provides trusted, verifiable identity-related information from external sources to smart contracts or decentralized applications (dApps). Since blockchains cannot inherently access offchain data, oracles serve as bridges between the blockchain and the outside world. **An identity oracle specifically supplies identity attestations or verification data—such as KYC (Know Your Customer) or AML (Anti-Money Laundering) credentials—that have been issued by trusted authorities.** This enables smart contracts to make decisions or execute actions based on verified identity information without compromising privacy or security.

For example, an identity oracle might:

- Provide cryptographically verifiable attestations about an individual's or entity's identity status.
- Enable decentralized applications to verify user credentials (like AML/KYC compliance) before granting access or executing transactions.
- Facilitate the use of digital identities represented by Decentralized Identifiers (DIDs) and Verifiable Credentials (VCs) within blockchain ecosystems.
- By integrating identity oracles, blockchain systems can securely and reliably incorporate off-chain identity data, enhancing trust, compliance, and operational efficiency in financial and other regulated sectors.

4.2.5 Custodian

In the fund tokenisation ecosystem, the Custodian plays a critical role in safeguarding the digital tokens that represent fund ownership on behalf of investors. This responsibility involves securely managing private keys through advanced security measures such as multisignature (multisig) wallets and cold storage solutions. By doing so, custodians protect investors' assets from theft, loss, or unauthorized access, ensuring the integrity and safety of tokenised holdings.

On the blockchain, custodians provide essential interfaces for transaction approvals, enabling secure and controlled execution of transfers and redemptions. They also offer comprehensive reporting and support regulatory compliance, helping to maintain transparency and trust within the ecosystem. Prominent key players in this space include Fireblocks, Copper, BitGo, Taurus, and Anchorage, all of which specialize in secure digital asset custody solutions tailored for institutional investors and fund managers.

4.2.6 Transfer Agent or Registrar

In the fund tokenisation ecosystem, the Transfer Agent or Registrar plays a vital role in maintaining the register of token holders and managing ownership records directly on the blockchain. Unlike traditional systems where ownership records are maintained offchain by centralized entities, the blockchain ledger itself serves as the authoritative source of truth. This shift enhances transparency and security by providing an immutable and easily auditable record of all token holders.

[5] An oracle in the blockchain world is a trusted node or service that provides smart contracts with external real-world data, enabling them to interact with events or information outside the blockchain.

On-chain, smart contracts take over the responsibilities of tracking all token transfers and redemptions in real time. These contracts also embed compliance logic to restrict unauthorized transfers, ensuring that only permitted transactions occur according to regulatory and fund-specific rules. By automating these processes, the Transfer Agent's functions become more efficient, reducing administrative overhead and minimizing the risk of errors or fraud within the tokenised fund ecosystem.

4.2.7 Payment and Settlement Layer

The Payment and Settlement Layer plays a fundamental role in the fund tokenisation ecosystem by facilitating subscription and redemption payments. **This layer enables investors to transfer tokenized cash, such as USDC, EURS, or tokenized bank deposits, providing a seamless and efficient means of handling transactions.** By utilizing digital tokens for cash transfers, the system ensures a modernized and streamlined payment process that aligns with the broader digital asset infrastructure.

On the blockchain, the Payment and Settlement Layer ensures that settlements are instantaneous and atomic, meaning that the delivery of tokens and payment occur simultaneously, eliminating settlement risk. Additionally, redemptions can be automated through smart contract triggers, allowing investors to redeem their holdings without manual intervention. This automation enhances efficiency and reduces operational friction, making the entire payment and settlement process more secure and reliable within the tokenised fund ecosystem.

In the BlackRock BUIDL fund, the payment and settlement layer operates entirely on-chain, using USDC (USD Coin) as the medium of exchange. Investors subscribe to the fund by transferring USDC to a smart contract managed by Securitize, which simultaneously delivers the equivalent amount of BUIDL tokens, representing shares in the fund—executing a real-time, atomic Delivery versus Payment (DvP) process.

This eliminates traditional settlement delays (e.g., T+2) and counterparty risk. Upon redemption, the process reverses: BUIDL tokens are burned, and USDC is instantly returned to the investor's wallet. Custody and wallet infrastructure are supported by regulated digital asset custodians such as Coinbase, BitGo, and Anchorage Digital, ensuring security and compliance within a permissioned ecosystem.

4.2.8 Onchain Exchange & Distributors

Token marketplaces and exchanges, such as ADDX, Securitize Markets, DigiFT, INX, and Archax, facilitate secondary market trading of fund tokens with programmable compliance enforcement.

Looking ahead, regulators or regulatory nodes within the tokenized ecosystem may monitor transactions in real time, automate reporting through onchain event logging, and enforce compliance via programmable rules. In comparison, regulatory oversight in traditional funds is largely manual, periodic, and dependent on self-reporting by fund managers and intermediaries.

From a distributor's perspective, several opportunities arise with fund tokenization. It enables outreach to new types of investors and access to previously untapped market segments. Distributors can also expand the distribution of specific investment products by combining liquid and semi-liquid offerings. Operational efficiency is significantly enhanced through the use of a single blockchain-based repository, which facilitates reconciliations and reporting while improving accessibility, transparency, and overall efficiency. This can lead to better returns on investment by managing costs more effectively and reducing reliance on multiple trading platforms. Additionally, tokenization provides a viable alternative to traditional manual trading channels, such as fax. Finally, risk mitigation is improved by eliminating settlement risk, making transactions safer and more reliable.

4.2.9 Regulator / Regulatory Node (future vision)

In the fund tokenisation ecosystem, the role of the Regulator or Regulatory Node is crucial for ensuring oversight and compliance enforcement. This entity is envisioned to play a proactive role in monitoring transactions in real time, thereby enhancing transparency and security within the ecosystem. By leveraging blockchain technology, regulatory nodes can automate reporting processes through onchain event logging, which facilitates timely and accurate compliance checks without manual intervention.

Furthermore, the Regulator's responsibilities extend to enforcing compliance through programmable rules embedded directly on the blockchain. For example, restrictions such as prohibiting secondary trading without the appropriate license can be automatically enforced, reducing the risk of unauthorized activities. This future vision of regulatory nodes aims to create a more efficient, transparent, and secure environment for fund tokenisation by integrating regulatory oversight directly into the blockchain infrastructure.

4.3 Fund Tokenization Use Cases

Fund tokenization, despite its frequently touted benefits, is still in a **nascent stage**, **facing significant challenges that hinder its widespread adoption**. The necessary infrastructure to support effective fund tokenization is not yet fully developed, and the ecosystem required for its success remains immature.

Contrary to early expectations, the **anticipated cost savings have not materialized**. According to the World Economic Forum, there is currently no evidence that tokenized funds offer cost advantages over traditional funds. Moreover, **secondary markets** for these tokenized assets are either **non-existent** or **suffer from low liquidity**, largely because many rely on private blockchains with whitelist restrictions. The **absence of central bank digital currencies** (CBDCs) further complicates the realization of several client benefits that tokenization promises.

As a result, most current use cases for fund tokenization are **limited to stand-alone Proof of Concepts** (PoCs) that focus on issuance and initial subscription, without extending to secondary market trading or full lifecycle management, such as corporate actions. Many of these implementations essentially replicate traditional models, with the primary difference being that tokens are issued on a blockchain. Adoption tends to be driven by **niche business cases and "low-hanging fruit" specific to individual fund managers and market segments**.

Figure 10 Use Cases, Benefits, and Implementation Status

Use Cases	Improvement	Description	Key Benefits	Status	Status / Limitations
Fractional Ownership	1-Access & Liquidity	Tokenization enables dividing fund shares into smaller units.	Lower entry barriers, increased investor access	3-Limited	Implemented in some tokenized real estate and private equity platforms.

Access to Illiquid Assets (e.g., VC, Real Estate)	1-Access & Liquidity	Tokenizing private equity, real estate, etc., and embedding into fund structure.	Democratization of alternative investments	3-Limited	Growing use in private markets; limited access for retail investors.
Higher Trading Frequency	1-Access & Liquidity	Tokens can be traded on secondary markets or P2P platforms.	Enhances exit options, allows more dynamic pricing	3-Limited	Limited by regulatory approval and licensed exchanges.
24/7 Transferability & Global Access	1-Access & Liquidity	Tokens are transferable across borders and time zones.	Increased accessibility and global reach	3-Limited	Many jurisdictions restrict cross-border token transfer; Peer to Peer Limitations; Whitelisting.
Faster Settlement and Clearing	2-Cash Management	Blockchain reduces T+2/3 settlement to near-instant.	Lower counterparty risk, greater efficiency	3-Limited	Settlement often delayed due to fiat integration (CBDC) and custody laws.
Reduced Fees : Disintermediation	3-Distribution Operations	Removes traditional middlemen like transfer agents and some custodians.	Lower management and operational costs	1-Theoretical	Legal and custody requirements still necessitate some intermediaries.
Dynamic Fund Structures (e.g., rebalancing, swaps)	4-Investment Management	Token rules can encode logic for fund rebalancing, asset swaps.	Increased flexibility, rapid portfolio adjustments	1-Theoretical	Emerging – Active in DeFi; limited adoption in regulated fund environments.
Access to Real-Time NAV	4-Investment Management	NAV can be calculated and reported more frequently using smart contracts.	Transparency, timely investment decisions	3-Limited	Depends on high-quality, real-time pricing oracles and asset feeds.
Transaction collateral	4-Investment Management	Use of tokenized money market funds as collateral in financial transactions and lending.	Provides liquid, low-risk collateral; facilitates faster and more efficient lending; reduces counterparty risk.	1-Theoretical	Regulatory uncertainty around collateral acceptance; limited market infrastructure; valuation and liquidity risks in volatile markets.
Streamlined Fund Administration	5-Operations	Smart contracts automate NAV updates, dividend distribution, etc.	Lower operational costs, reduced intermediaries	2-Developing	Still reliant on off-chain oracles and third-party inputs.
Programmable Dividends and Profit Sharing	5-Operations	Automatic profit distributions based on predefined rules.	Transparency, punctual disbursement	1-Theoretical	Active in pilot projects; depends on blockchain accounting accuracy.
Transparency and Auditability	6-Compliance & Regulation	On-chain records provide real-time tracking of transactions and holdings.	Easier auditing, enhanced investor trust	4-Active	Available, but not widely adopted by traditional funds.
Automated Compliance (KYC/AML)	6-Compliance & Regulation	Smart contracts enforce identity and jurisdictional checks.	Real-time regulatory compliance, reduced manual errors	3-Limited	Requires integration with KYC providers; compliance standards vary.
Regulatory Reporting Automation	6-Compliance & Regulation	Token metadata can be used to generate required reports.	Real-time, reliable regulatory filings	1-Theoretical	Needs broader standardization and regulator tech adoption.

Source: Amundi BI

4.3.1 Access & Liquidity

By transforming fund units into tokens, investors in tokenized funds can engage in traditional, or mainstream, investments while gaining the added theoretical advantage of easier trading in a secondary market. This enhanced transferability could attract more investors to tokenized funds and, more broadly, channel additional investment into start-up companies and other businesses by reducing minimum investment levels.

Investment fund tokens are easily and securely transferable through blockchain technology, enabling investors to diversify their portfolios, minimize risk, and create liquidity in the market. Conversely, issuers gain access to a wider pool of investors who may not have previously been able to participate due to higher upfront capital requirements. Tokenized funds facilitate secondary market trading, potentially maintaining assets under management while reducing the costs associated with maintaining liquidity in the fund.

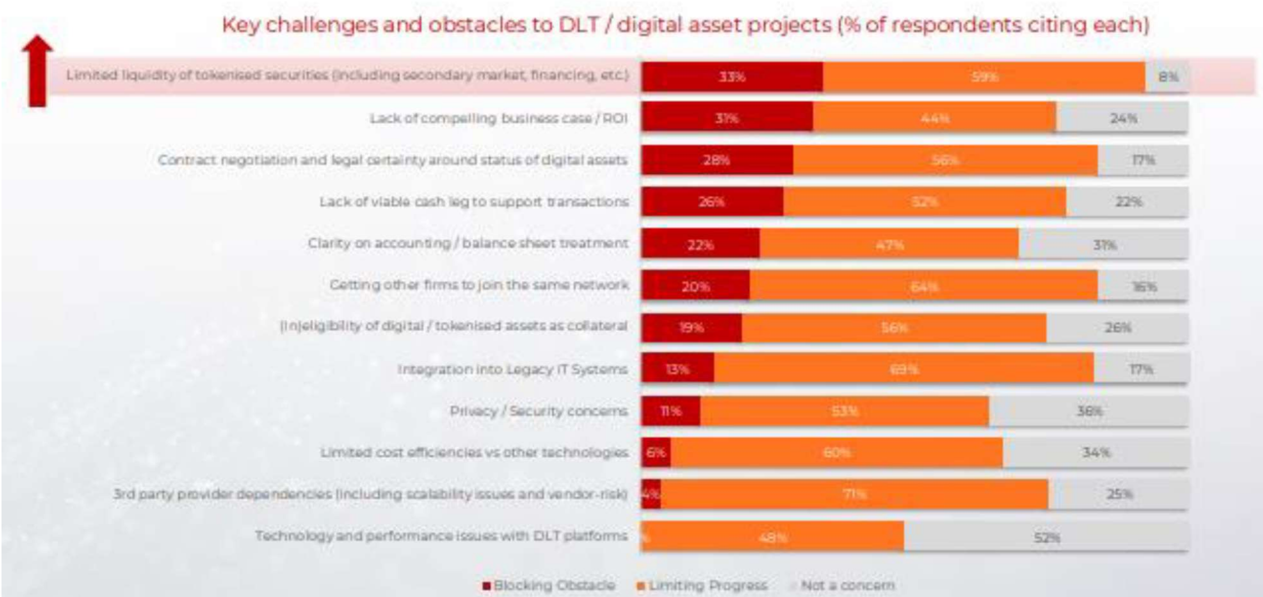
In the context of alternatives, the assets to be tokenized are limited partnership (LP) interests in alternative funds. The actual process of tokenization involves specialized software that can create smart contracts embedded with relevant information.Two transformational capabilities that could be enabled by tokenization are:

- **Automating Capital Calls**: Capital calls represent a significant point of friction in the alternatives space today, as they are often unpredictable, time-sensitive, and manual. In a future state where cash is maintained on-chain, tokenization could automate this process, enhancing the experience for both investors and advisors while reducing the need for reconciliations.
- **Scalable Customization**: Once the foundational layers are established, smart contracts could facilitate scalable customization of tokenized portfolios. This could include funds of funds focused on alternative investments or blended discretionary portfolios that combine tokenized traditional and alternative funds.

Overall, tokenization has the potential to address persistent frictions related to ease of investing, enhance exit timelines, support broader borrowing against holdings, and enable customizable portfolios. However, it is important to note that tokenization will not resolve all aspects of the alternatives investment lifecycle.

Yet, the theoretical liquidity and access use case of tokenization remains theoretical. When asked about the key challenges and obstacles to DLT and digital asset projects, the most critical barrier cited by stakeholders is the limited liquidity of tokenized assets. This includes challenges related to the secondary market, financing, and the overall trading environment for these assets. Investors have expressed that while the potential for tokenization is significant, the current lack of liquidity severely hampers their interest and willingness to engage with tokenized funds. This situation is particularly concerning because liquidity is essential for investors who seek to enter and exit positions with ease. Without a robust secondary market, the ability to trade tokenized assets becomes constrained, making them less attractive compared to traditional investment vehicles.

Figure 11 Key challenges and obstacles to DLT / digital asset projects (% of respondents citing each)



Source: DLT in the Real World 2025 (The Value Xchange)

4.3.2 Cash Management

Another operational advantage that may make tokenized funds attractive to investors is the ability to trade 24 hours a day, 365 days a year. Distributed Ledger Technology (DLT) eliminates wait times and enables instant settlements, as it does not rely on human intervention to execute transactions or implement processes. This allows investors to transact at their own convenience.

In contrast, settlements within the traditional investment fund ecosystem can take a significant amount of time, with some transactions requiring approximately a week to settle. Blockchain technology significantly reduces transaction times, enabling settlements to occur instantaneously—often within minutes or even seconds. Additionally, the instantaneous nature of transaction settlements mitigates the risk that a counterparty may fail to meet its obligations.

Efficiency gains can be realized through the transfer of value without the need for trusted centralized intermediaries and through the efficient automation of processes. This results in faster, potentially cheaper, and frictionless transactions driven by disintermediation and automation.

4.3.3 Distribution Operations

Reduced fees through disintermediation involve removing traditional middlemen such as transfer agents and some custodians from the investment process. By eliminating these intermediaries, funds can potentially lower management and operational costs, resulting in cost savings that may be passed on to investors. This streamlined approach aims to make fund management more efficient and affordable. However, this concept remains largely theoretical at this stage because legal and custody requirements still necessitate the involvement of certain intermediaries. As a result, complete disintermediation is challenging to achieve in practice due to regulatory and operational constraints.

4.3.4 Investment Management

Dynamic fund structures leverage token rules to encode automated logic for activities such as fund rebalancing and asset swaps. This means that the fund can adjust its portfolio composition more flexibly and rapidly, responding to market conditions or investment strategies without manual intervention. Such automation increases the agility of portfolio management, allowing for quicker adjustments that can optimize returns or manage risks more effectively. However, this approach is still emerging, with active development and adoption primarily seen in decentralized finance (DeFi) platforms. Its use remains limited in traditional, regulated fund environments due to regulatory complexities and the need for compliance with established financial rules.

Access to real-time Net Asset Value (NAV) is made possible through the use of smart contracts, which allow NAV to be calculated and reported more frequently than traditional methods. This capability enhances transparency for investors by providing up-to-date information on the value of their investments. As a result, investors can make more timely and informed decisions based on the most current data available. However, the effectiveness of real-time NAV reporting depends heavily on the availability of high-quality, real-time pricing oracles and asset data feeds. Any delays or inaccuracies in these data sources can compromise the reliability of the NAV calculations.

Transaction collateral refers to the use of tokenized money market funds as collateral in financial transactions and lending. This approach offers several advantages, including providing liquid and low-risk collateral that can facilitate faster and more efficient lending processes. Additionally, using tokenized assets as collateral helps reduce counterparty risk by ensuring that the collateral is easily verifiable and accessible. Despite these benefits, there are challenges to widespread adoption, such as regulatory uncertainty surrounding the acceptance of tokenized assets as collateral. Furthermore, the market infrastructure to support this use is still limited, and there are potential risks related to valuation and liquidity, especially during periods of market volatility.

4.3.5 Operations

Tokenized funds have the potential to transform the roles of various firms and organizations that were previously considered essential participants in the traditional fund management ecosystem. Some intermediaries may experience changes to their roles as fund transactions and other activities become automated. While this shift could enhance operational efficiency and resilience by reducing the number of organizations involved in tokenized fund management, there are several pertinent issues that warrant discussion.

4.3.6 Compliance & Regulation

Processes such as Anti-Money Laundering (AML) and Know Your Customer (KYC) can be automated through Distributed Ledger Technology (DLT), providing a common source for digital identification. These processes can also be programmed into the blockchain via smart contracts, ensuring that certain actions can only be undertaken once AML and KYC evidence has been submitted and recorded on the chain. This automation would increase efficiency and reduce human errors, helping to ensure compliance with legislation and preventing fund managers from inadvertently dealing with the proceeds of crime or sanctioned individuals.

Information related to the tokenized fund could be stored within the token itself, encompassing ESG data or any relevant information for investors, such as underlying portfolio data or additional details related to the fund, including its prospectus. DLT can also facilitate investor engagement, such as voting.

For broader adoption and enhanced efficiency, it would be beneficial to integrate more elements of investment processing onto the blockchain. For instance, embedding an investor's profile, including AML/KYC information, into a token could enable one token to invest in another, streamlining the process and adding significant value to fund tokenization and distribution.

5 Regulation: A Technologically Neutral, Supportive Approach

In this section

The global regulatory environment for fund tokenization is driven by regulators that are broadly supportive in principle but conservative in practice. Such a supportive but cautious stance is illustrated by the introduction of regulatory sandboxes in many countries with some major exceptions including the US, Luxembourg and Ireland, as regulators seek to test tokenized fund models under controlled conditions before amending their regulation. These regimes aim to bridge traditional regulation with decentralized infrastructure.

For most markets (Europe, US, Asia) we reviewed, regulations tend to focus on "substance over form" as financial regulators generally put forward a "technology-neutral" stance. Plainly speaking, this means that the use of blockchain or tokens does not exempt funds from existing securities laws or fund regulations. Tokenized shares are still securities—subject to the same licensing, disclosure, AML/KYC, and custody requirements.

This is the case in the European Union (EU), which has adopted a technology-neutral stance and harmonized rules across member states, with consistent guidance from ESMA. Tokenized fund units are clearly treated as financial instruments under MiFID II, and fund managers must comply with UCITS or AIFMD requirements regardless of the technological medium. The EU also supports innovation through the DLT Pilot Regime, which allows real-world testing of tokenized securities infrastructure under regulatory oversight.

The US is also technology-neutral in principle but does not have a comparable unified regime, creating uncertainty for market participants. Regulatory oversight is fragmented among the SEC, CFTC, FINRA, and state regulators, often causing compliance challenges. In the US, determining whether a tokenized unit is a security typically depends on the Howey Test[6] or other legal criteria, and issuers must navigate complex registration or exemption pathways. The US lacks a national sandbox and innovation efforts often face procedural hurdles.

Overall, even if the EU offers a clearer, more supportive regulatory environment for tokenized funds, compared to the US' fragmented environment, we note that this has not stopped the US from developing the largest tokenized fund market in the world, with a certain number of US manager funds being set up offshore in the British Virgin Islands or the Bermudas in order to tap the institutional market only.

5.1 National & Regional Regulatory Framework

Current regulatory frameworks in application or in development for digital finance differ greatly across key jurisdictions. **The differentiation is observed on a**

[6] The Howey Test determines whether an asset is a security by assessing if there is an investment of money in a common enterprise with an expectation of profits primarily from the efforts of others.

spectrum—that is, whether to insert digital finance and digital products within existing securities market laws or whether to create an entirely new set of rules that apply only to certain digital products. More regulatory information with respect to fund tokenization can be obtained from Amundi's Legal Practice Group on Digitalization of Asset Management Activities.[7]

5.1.1 EU

When originally drafted, EU financial services legislation did not envisage DLT and/or digital assets and therefore contains provisions which may prevent or constrain the use of DLT in the issuance, trading and settlement of financial instruments. The **DLT Pilot Regime** (the "Pilot Regime"), established under Regulation (EU) 2022/858, seeks to address this issue and facilitates DLT integration into financial markets, ensuring at the same time investor protection and market integrity. It facilitates the creation of digital financial instruments and the establishment of trading platforms for such assets.

Effective from 23 March 2023, the Pilot Regime allows for the issuance, trading, and settlement of tokenized financial instruments within a controlled environment. It has been set for an initial period of three years up to March 2026, with a possible three-year extension, during which the European Commission will assess its effectiveness.

It introduces three categories of DLT market infrastructures. These infrastructures can apply for exemptions from certain requirements under existing EU financial regulations, such as MiFID II, MiFIR, and CSDR to enable the use of DLT without contravening such legislation.

- DLT Multilateral Trading Facilities (DLT MTFs) for trading tokenized securities;
- DLT Settlement Systems (DLT SSs) for settling transactions in tokenized securities, and;
- DLT Trading and Settlement Systems (DLT TSSs) that combine trading and settlement functionalities.[8]

At the instrument level, the Pilot Regime applies to specific financial instruments, including shares with issuers having a market capitalization below €500 million, bonds with an issuance size under €1 billion, **and units in UCITS Funds with assets under management below €500 million**[9], with the total market value of all DLT financial instruments admitted to trading on a DLT market infrastructure not exceeding €6 billion at the time of admission.

Fund managers interested in tokenizing fund units within the EU engage with their National Competent Authorities (NCAs) to apply for participation in the Pilot Regime, ensure compliance with applicable EU regulations, and monitor regulatory developments, as the Pilot Regime is subject to evaluation and potential integration into permanent legislation.

[7] Contact: Anna Chiara Chisari, Head of Legal (Products) at Amundi Italy.

[8] 21X, a Frankfurt-based fintech firm, has obtained the first license to operate a multilateral trading facility and settlement system for tokenized securities and other DLT-based financial instruments under the EU's DLT Pilot Regime.

[9] At the moment of admission to trading or the moment of recording on a distributed ledger.

Overall, the introduction of the Pilot Regime has meant that the definition of "financial instruments" in MiFID II has had to be amended permanently. **A "financial instrument" now refers to all the financial instruments already listed in MiFID, including "instruments issued using distributed ledger technology".** As a result, the Pilot Regime allows trading and settlement of any type of financial instrument embedded in a blockchain. Tokenized financial instruments will therefore be subject to all the EU rules that apply to traditional financial instruments.

5.1.1.1 Luxembourg

In Luxembourg, the Pilot Regime is implemented by the Law of 15 March 2023, which further modifies the definition of financial instruments of the Law of 5 April 1993 on the financial sector (LFS) and the Law of 30 May 2018 on markets in financial instruments (MiFID II law), clarifying that this concept includes financial instruments issued using distributed ledger technology. The regulatory framework for tokenized funds has been progressively developed to integrate DLT into the traditional financial sector, aiming to provide legal certainty and foster innovation in fund structuring and management.

Key legislative measures include the so-called **Blockchain Law IV** enacted in December 2024, which enhances the legal framework for distributed electronic ledgers in the financial sector. By amending, *inter alia*, the 2013 Law on Dematerialization of Securities, (a) it allows equities and fund units transactions to be processed on a distributed electronic ledger; and (b) it provides for the role of “control agent”, which is meant to facilitate the maintenance of securities—including fund units—issuance accounts.

The Association of the Luxembourg Fund Industry (ALFI) provides guidance on tokenization and digital custody, assisting fund managers in navigating the regulatory landscape.

We did not identify specific regulatory sandbox initiative in Luxembourg similar to those in Switzerland, Singapore, or the UK. Instead, Luxembourg's approach to digital assets and tokenization focuses on an advanced legal and regulatory framework rather than a dedicated sandbox.

5.1.1.2 Italy

Italy has adopted the Pilot Regime through Decree No. 25/2023 (“**FinTech Decree**”), which enables the issuance and trading of financial instruments, including fund units, on blockchain platforms. This regulatory regime allows, even outside the scope of the Pilot Regime, the issuance and circulation of digital financial instruments (including funds) not intended to be traded on trading venues.

One of the key innovations introduced by the resolution is the figure of the “Responsabile del Registro” (Register Manager). This entity is responsible for maintaining the integrity, security, and legal validity of the distributed ledger. The Register Manager ensures that all entries relating to issuance and transfer are accurate, auditable, and consistent with applicable law. Depending on the structure, the role may be performed by the issuer, a third-party service provider, or an authorized DLT market infrastructure.

Consob, after a public consultation with the market, has adopted the “Regulation on the issuance and circulation of financial instruments on DLT” envisaged by the

FinTech Decree. The Regulation defines the principles and criteria relating to the formation and maintenance of the list of Register Managers and other implementation measures.

Additionally, **Assogestioni**, Italy's asset management association, has issued guidelines to support the establishment and operation of Italian Digital Funds, providing non-binding recommendations on key aspects such as fund issuance, custody of digital assets, and distribution channels.

Italian authorities have also introduced regulatory sandboxes that facilitate experimentation with DLT-based financial services, including tokenized funds, allowing for controlled testing of innovative solutions under regulatory supervision.

5.1.1.3 France

In France, the primary regulator is the Autorité des Marchés Financiers (AMF), with oversight from the ACPR when banking entities are involved. Tokenized shares are considered financial instruments, and their issuance and management must comply with the French Monetary and Financial Code, the UCITS Directive, AIFMD, and MiFID II, depending on the fund type. **The 2017 Blockchain Ordinance introduced the concept of DEEP (Dispositif d'Enregistrement Électronique Partagé), allowing blockchain to serve as a register for unlisted securities.**

Under Article L. 211-7 of the Monetary and Financial Code, management companies have the autonomy to decide whether to tokenize all or part of a fund's shares/units, with the prospectus specifying the account keeper for DEEP-registered shares, which may be the issuer or a delegated regulated service provider. For funds with partial tokenization alongside bearer shares (e.g., in Euroclear), management companies or custodians must aggregate and reconcile data on total shares in circulation, ensuring operational accuracy

The AMF has supported pilot projects using blockchain infrastructure (such as those by Société Générale-FORGE, BNP Paribas, AXA IM) but emphasizes that tokenized funds must meet all traditional regulatory requirements. Additionally, tokenized funds may benefit from the Pilot Regime, which allows limited exemptions for trading and settlement using blockchain. Overall, tokenized funds in France are fully integrated into the regulatory framework for traditional finance, with blockchain used as a technological layer, not a regulatory escape.

The "*Pacte*" law of 11 April 2019 provides for a regulatory framework for some crypto-assets industry actors and their supervision by the AMF, a framework for fundraising via the issuance of virtual tokens (Initial Coin Offering - ICO) and the licensing for digital assets services providers to cover activities on digital assets. Finally, it should be noted that the AMF issued guidance regarding the implementation of the Pilot Regime in France (AMF Instruction DOC-2024-07).

France aims to be a key player in this market, and is developing, in partnership with regulators (with both French and European), blockchain-focused financial regulatory **sandbox** regime since March 2023, designed to foster innovation in financial market infrastructures using blockchain, with ongoing regulatory adaptations aligned with European regulations.

5.1.1.4 Ireland

In Ireland, tokenized funds are governed under the existing legal regime for investment funds, without a bespoke framework for tokenization. The Central Bank of Ireland, Ireland's main financial regulator, takes a technology-neutral approach, meaning that DLT may be used for register maintenance or transfer processes, provided that it does not undermine regulatory compliance, particularly in relation to investor protection, safekeeping, recordkeeping, and fund governance. DLT-based systems must meet the same standards of legal certainty, operational resilience, and auditability as traditional infrastructures. **As of 2025, the CBI has not issued specific guidance on tokenized fund units, but it reviews such structures on a case-by-case basis as part of the authorization process.**

An amendment to the Irish MiFID Regulations effective 23 March 2023 revised the definition of "financial instrument" to include those issued by means of DLT, facilitating Irish funds' potential investment in tokenized financial instruments subject to applicable product rules. Further, the CBI has publicly communicated the benefits that tokenization can offer to the regulated investment fund infrastructure and investors, highlighting fund tokenization as one of its key regulatory initiatives in its 2025 Regulatory & Supervisory Outlook Report. The CBI highlighted in its 2025 report that fund tokenisation is one of the CBI's key regulatory initiatives. As part of this, the CBI has confirmed that it intends to publish a Discussion Paper on the potential application of tokenisation within investment funds.

On a wider scale, the Funds Sector 2030 Report (FSR) issued by the Department of Finance in October 2024 highlighted the transformative potential of technologies like tokenization in the funds and asset management sector, particularly noting benefits for money market funds.

Ireland does not have a formal regulatory **sandbox that has been used for DLT-related projects** like some other jurisdictions (e.g., the UK or Singapore). However, the Central Bank of Ireland (CBI) operates an Innovation Hub, which acts as a point of contact for fintech and financial innovation firms, including those exploring DLT or tokenization.

5.1.2 United Kingdom

Overall, as for other major financial regulators, the FCA maintains a technology-neutral position, indicating that existing regulations can accommodate tokenized funds, and encourages firms to engage with the FCA to ensure compliance and address any specific considerations related to DLT implementations.

Tokenized funds must comply with existing regimes, such as UK UCITS, NURS (Non-UCITS Retail Schemes), QIS (Qualified Investor Schemes), UK AIFMD. Tokenized funds still require a depositary or custodian that meets FCA requirements, and settlement finality and safeguarding of client assets, even if done via DLT. DLT-based registries or transfer agents must meet operational resilience and data integrity standards. Secondary trading may require operation on a regulated trading venue if the tokens are transferable securities. If tokenized units are transferable and offered to the public or admitted to trading, UK Prospectus Regulation may apply.

The FCA has published a five-year strategy to 2030, explicitly supporting growth and innovation in tokenisation within asset management, emphasizing the importance of fostering a regulatory environment that encourages responsible innovation while maintaining market integrity and consumer protection. The Investment Association's IF3 Lab serves as a dedicated facilitation environment, enabling firms to experiment with Web 3.0 fund concepts, including tokenized fund structures, digital asset custody, and blockchain-based operational models.

The Financial Conduct Authority (FCA) and HM Treasury have expressed support for fund tokenization initiatives and have collaborated with industry stakeholders through the Technology Working Group, part of the Asset Management Taskforce, to develop a strategic blueprint for implementing fund tokenization in the UK.

In November 2023, the Technology Working Group's report outlined a phased approach, starting with a "Phase One" baseline model that allows for the tokenization of fund units within the existing legal and regulatory framework, focusing on operational efficiencies and enhanced investor experiences. **This phase stipulates that funds must meet specific criteria to qualify for tokenization, including being authorized, holding mainstream assets, utilizing a private, permissioned blockchain, and settling transactions in the same manner as current practices, without the use of digital currency.** Additionally, fund managers are required to consider various factors during implementation, such as investor communications and the interests of existing unitholders. **Phase two, focused on expanding the use cases identified in the first phase and securing regulatory support for the deployment of fund tokenization has also been completed.** Following this, the Technology Working Group released a follow-up report in March 2024, which delved into further tokenization use cases and provided draft prospectus risk factors for fund managers of tokenized funds to enhance their disclosures.

The UK Digital Securities **Sandbox** (DSS) is a regulated live environment launched on 30 September 2024 through collaboration between HM Treasury, the Bank of England, the FCA, and the financial services sector. Its main goals are to facilitate innovation, protect financial stability, and safeguard market integrity by enabling firms to explore how DLT can transform financial market infrastructures (FMIs). The DSS will be operational until December 2028 but can be extended by the Government.

5.1.3 Asia

5.1.3.1 Hong Kong

Hong Kong has developed a robust regulatory framework to facilitate the tokenization of funds and financial instruments, establishing itself as a prominent digital asset hub in Asia.

In November 2023, the Securities and Futures Commission (SFC) issued two circulars that provide guidance on the tokenization of SFC-authorized investment products, ensuring that these products uphold the same investor protection and regulatory compliance as traditional offerings. The SFC also outlined the responsibilities of intermediaries involved in tokenized securities, emphasizing due diligence, cybersecurity, and custody arrangements. The framework introduces "Stage One" tokenized funds, which utilize private and permissioned DLT while maintaining traditional fund structures and adhering to existing valuation and reporting standards.

In February 2024, the HKMA published comprehensive guidance in the circular on provision of digital asset custody services and circular on the sale and distribution of tokenised products by authorised institutions in Hong Kong. Together, these two circulars set out the supervisory standards expected of authorised institutions when engaging in custody and dealing activities in relation to digital assets.

Additionally, the Hong Kong Monetary Authority (HKMA) has initiated **Project Ensemble, a regulatory sandbox** aimed at exploring tokenized deposits and assets as well as interbank digital settlement mechanisms. To further enhance its appeal, Hong Kong has proposed tax exemptions on gains from digital assets, including tokenized investments, as part of a strategy to attract asset managers and high-net-worth individuals.

5.1.3.2 Singapore

Singapore's regulatory framework for tokenized funds is primarily driven by the Monetary Authority of Singapore (MAS), which has established a technology-neutral approach that treats tokenized funds like conventional securities based on their economic substance.

The Securities and Futures Act (SFA) 2001 governs tokenized fund units that qualify as capital markets products, requiring compliance with prospectus requirements and appropriate licensing for fund managers and intermediaries. The Financial Advisers Act (FAA) 2001 regulates entities providing financial advisory services related to tokenized funds, ensuring investor protection through licensing and disclosure obligations. The Payment Services Act (PSA) 2019 may apply to tokenized funds involving payment services, necessitating licensing for entities providing digital token custody or transfer.

MAS has launched guidelines clarifying when funds qualify as securities under Singapore's Securities and Futures Act, and it mandates compliance with anti-money laundering and counter-terrorism financing standards. In 2024, MAS introduced the Guardian Funds Framework, outlining best practices for implementing tokenized funds, including onchain fund share registers, smart contract design principles, investor rights protection, and real-time settlement infrastructure.

In addition to its regulatory efforts, Singapore has initiated several projects to support fund tokenization under a **sandbox** approach. Project Guardian, launched in 2022, aims to test DLT across financial services, with over 15 pilot trials conducted in collaboration with more than 40 global financial institutions. Successful pilots include UBS Asset Management issuing and redeeming tokenized money market fund shares and a collaboration involving SWIFT, Chainlink, and MAS to test cross-border settlement of tokenized funds.

5.1.3.3 South Korea

In South Korea, tokenized funds are regulated as traditional financial instruments under the Financial Services and Capital Markets Act (FSCMA) and Digital Securities Guidelines.

In February 2023, the Financial Services Commission (FSC) issued guidelines for "digitally tokenized securities," which are defined as securities issued using DLT while still being classified as traditional securities, and must therefore comply with existing securities laws. They fall under capital markets and financial investment laws and are governed by the FSCMA, which covers Collective investment schemes (CIS), securities issuance, and asset management. These securities must be issued and traded through licensed institutions, such as the Korea Securities Depository (KSD) and licensed brokers or trading platforms, with issuers required to adhere to standard prospectus and investor protection rules. Additionally, tokenized fund shares necessitate custody arrangements that comply with securities and fund regulations, and they must be traded on approved digital securities platforms under the oversight of the Korea Exchange or similar regulatory bodies. The KSD is also in the process of developing the necessary infrastructure to support tokenized securities, including fund units.

A **sandbox** program has been used to trial tokenized financial products.

5.1.3.4 Malaysia

As of May 2025, Malaysia is in the process of developing a regulatory framework to support the tokenization of capital market products, including funds. The Securities Commission Malaysia (SC) initiated a public consultation on May 6, 2025, releasing a consultation paper that outlines a proposed framework focused on "digital twin" representations, where traditional securities are mirrored on DLT platforms.

This framework adopts a technology-neutral stance, ensuring that tokenized products adhere to the same regulatory standards as their traditional counterparts. It applies to various capital market products, including securities, derivatives, private retirement schemes, and unit trust schemes, and encompasses issuers, recognized market operators, and holders of Capital Markets Services Licenses. Key regulatory requirements include robust governance structures, comprehensive risk management practices, and clear disclosure to investors.

The SC proposes a phased implementation approach, initially focusing on digital twin representations while excluding "native tokens" due to their complexity. Additionally, in collaboration with Khazanah Nasional Bhd, the SC plans to introduce tokenized bonds and sukuk in 2025, aiming to enhance retail participation in Malaysia's capital market. Asset managers have been encouraged to engage with the SC during the consultation period, which closed on June 16, 2025, to stay informed about the evolving regulatory landscape.

5.1.4 United Arab Emirates

In the UAE, the regulatory framework for tokenized financial instruments is primarily governed by three key authorities: the Securities and Commodities Authority (SCA), the Dubai Financial Services Authority (DFSA), and the Financial Services Regulatory Authority (FSRA).

The **SCA** oversees the onshore UAE (excluding free zones) and issued frameworks for securities token offerings (STOs) including tokenized fund units, with requirements for licensing, disclosures, and regulated custody.

The **DFSA** governs the Dubai International Financial Centre (DIFC) and introduced its Investment Tokens regime in 2021–2022, recognizing DLT-based fund units as securities under its Collective Investment Laws, subject to Anti-Money Laundering (AML) and Counter Financing of Terrorism (CFT) regulations compliance. Meanwhile,

The **FSRA**, under its Regulatory Framework for DLT and Digital Securities, classifies tokenized funds as Collective Investment Schemes (CIS), requiring fund managers and platforms to be licensed. Across all jurisdictions, tokenized funds must comply with stringent governance, disclosure, custody, and AML/CFT rules.

The UAE has seen significant interest in the tokenization of real estate funds, allowing fractional ownership and increased liquidity. The Pilot Phase of the Real Estate Tokenization Project, launched by the Dubai Land Department in collaboration with Virtual Assets Regulatory Authority (VARA), Dubai Future Foundation, and the Central Bank of the UAE, represents a significant advancement in property investment by utilizing blockchain technology for fractional ownership and creating a more inclusive real estate market in the UAE.

5.1.5 United States

In the United States, tokenized funds are governed by a comprehensive and evolving regulatory framework that treats them under existing securities and investment laws, without a separate regulatory regime.

Tokenized fund shares are generally considered securities under the Securities Act of 1933 and the Exchange Act of 1934, requiring issuers to either register with the SEC or rely on exemptions such as Reg D for private placements. Tokenized funds structured as mutual funds or ETFs must comply with the Investment Company Act of 1940, which includes requirements for asset custody by a qualified custodian, daily NAV calculation, and board oversight. Additionally, tokenized assets must be held with a qualified custodian, and entities maintaining records of beneficial ownership must be registered transfer agents. Secondary trading of tokenized fund shares must occur via regulated platforms, such as Alternative Trading Systems (ATS) registered with the SEC and FINRA.

While not directly related to fund tokenization, the Guiding and Establishing National Innovation for U.S. Stablecoins Act of 2025 (GENIUS Act) aims to establish a comprehensive federal regulatory framework specifically for the asset class of "payment stablecoins", which are currently regulated under state laws and regulation. Key features of the GENIUS Act include:

- Addressing financial stability concerns by imposing stringent reserve, liquidity, and risk management requirements on stablecoin issuers.
- Ensuring that all stablecoin issuers maintain one-to-one backing of their digital assets with liquid reserves.
- Clarifying that payment stablecoins are not securities, although their classification as commodities remains ambiguous.
- Defining a stablecoin issuer as a permitted entity that may operate as a subsidiary of an insured depository institution, an uninsured trust bank, or a nonbank entity, subject to regulatory approval.
- Limiting the Federal Reserve's role in direct oversight and shifting much of the regulatory authority to the Office of the Comptroller of the Currency and state-level regulators.

5.2 Sandboxes & Trials

Regulatory sandboxes and trials, such as those used for fund tokenization and the ECB DLT Trial, play a crucial role in the evolving landscape of financial technology. They provide a controlled environment where innovative solutions can be tested under a light regulatory regime, allowing stakeholders to explore the potential of new technologies like blockchain and digital assets while managing risks. These initiatives are essential for fostering innovation, ensuring compliance, and paving the way for broader adoption of secure and efficient financial instruments. The following report section profiles several of these sandboxes and trials, highlighting their significance in advancing fund tokenization.

5.2.1 ECB DLT Trials Focus

The European Central Bank (ECB), in collaboration with IZNES and Banque de France, conducted a Distributed Ledger Technology (DLT) trial in 2024 to explore the use of **wholesale Central Bank Money (CeBM)** for settlement in financial markets. The trial focused on **interoperability** across three blockchain platforms: **DL3S (Banque de France)**, **IZNES**, and **Societe Generale-FORGE**.

Overview

1. **Participants and Scope**

   - **Actors**: Central banks, asset managers (e.g., AXA IM, OFI Invest AM), investors (e.g., Generali), banks (e.g., BNP Paribas, Société Générale), and technology providers (e.g., IZNES).
   - **Transactions**: Over 200 transactions were conducted, including fund share subscriptions totaling €1 million.
   - **Objective**: To test instant **Delivery versus Payment (DVP)** using digital cash tokens for tokenized asset transactions.

2. **Technology**

   - **Hash Time Locked Contracts (HTLC):** Used to secure the DVP process, ensuring cryptographic proof of payment within a set timeframe. This mechanism guarantees operational integrity by ensuring funds are either delivered or returned.
   - **Interoperability:** Demonstrated seamless interaction between the three blockchain platforms.

3. **Two Experiment Streams**:

   - **Stream 1:** Generali subscribed to AXA IM tokenized funds using Banque de France's digital cash token, with BNP Paribas managing wallets on DL3S.
   - **Stream 2:** A more complex process where Generali subscribed to OFI Invest AM tokenized funds, reinvested into other funds and Societe Generale bonds, and concluded with redemptions. Societe Générale Securities Services acted as the Paying Agent.

Impacts and Outcomes

- **Operational Efficiencies:** Settlement and delivery times for financial instruments were significantly reduced.
- **Enhanced Security:** The use of HTLC ensured secure and reliable transactions.
- **Cost Reduction:** Lower operational costs for stakeholders through the use of digital cash tokens.
- **Transparency:** Improved fund management processes, particularly benefiting insurers and asset managers.

- **DLT Adoption:** Addressed key challenges in DLT adoption by demonstrating multi-platform interoperability.

Statements from Participants

- **IZNES:** Highlighted the transformative potential of blockchain interoperability for financial infrastructures.
- **OFI Invest AM:** Emphasized the trial's success in advancing secure token-based settlement for post-market processes.
- **Generali:** Noted the operational efficiencies and transparency gains achieved through blockchain and wholesale CeBM.

Key takeaways

This trial sets a **precedent** for integrating wholesale CeBM into real-world financial applications, showcasing its viability as a foundational element for future financial market infrastructures. It underscores the importance of **collaboration** among central banks, financial institutions, and technology providers in advancing digital finance.

5.2.2 Spain: CNMV Regulatory Sandbox Focus

The Regulatory Sandbox of the Spanish National Securities Market Commission (CNMV) serves as a controlled environment for testing innovative financial technologies, **particularly focusing on blockchain applications in asset management**. This initiative allows companies to experiment with new business models and technologies under the supervision of regulatory authorities, including the CNMV, the Bank of Spain, and the Directorate General of Insurance and Pension Funds. The sandbox aims to foster innovation while ensuring compliance with regulatory standards, providing a secure space for financial institutions to explore the transformative potential of blockchain technology.

One of the notable projects within the CNMV sandbox is the collaboration between BBVA Asset Management and Allfunds Blockchain. BBVA Asset Management launched a tokenized fixed income fund, the BBVA Token Renta Fija Corto Plazo, on the private Allfunds Blockchain. This pilot project allowed BBVA to explore blockchain's benefits in asset management, such as enhanced transparency and efficiency, within a regulated environment. The fund's units are registered and stored on a private blockchain network, streamlining subscription and redemption processes without affecting the investor experience.

Another significant initiative is the partnership between **Allfunds Blockchain and Renta 4 Banco. Together, they executed the first tokenized fund orders in Spain**, leveraging blockchain technology to enhance the efficiency and transparency of fund distribution. This collaboration highlights the potential of blockchain to revolutionize the funds industry by automating processes such as issuance, distribution, settlement, and registration of fund participants.

Allfunds Blockchain's involvement in the CNMV sandbox also includes the development of its FAST payment service for funds transfer, showcasing its commitment to advancing blockchain applications in the financial sector.

5.2.3 Singapore: Project Guardian Focus

Project Guardian is a collaborative initiative led by the Monetary Authority of Singapore (MAS) aimed at enhancing liquidity and efficiency in financial markets through asset tokenization. This project is significant in the context of mutual funds, as it seeks to establish frameworks, guidelines, and standards for the end-to-end lifecycle of financial asset tokenization, fostering interoperable and scalable commercial deployments across various asset classes.

Objectives

The primary objectives of Project Guardian include:

- **Establishing Industry Frameworks:** To create comprehensive guidelines for the tokenization process across different asset classes.
- **Developing a Sustainable Ecosystem:** To build a robust digital asset ecosystem with practical commercial use cases, guided by policy considerations.

Focus Areas

Key focus areas of Project Guardian encompass:

- **Open and Interoperable Networks:** Leveraging open networks to enable digital assets to be traded across multiple platforms and liquidity pools.
- **Trust Anchors:** Establishing a trusted environment through independent trust anchors that ensure risk management and entity onboarding.
- **Asset Tokenization:** Representing securities as digital bearer assets and tokenized deposits issued by financial institutions.
- **Institutional Grade Financial Protocols:** Implementing regulatory safeguards to mitigate market manipulation and operational risks.

Reference Model for Digital Asset Networks

Project Guardian employs a four-layered model to describe the technology components within a digital asset network:

1. **Access Layer:** Mechanisms for users to access services through various interfaces.
2. **Service Layer:** Services such as payments and exchanges that interact with different digital assets.
3. **Asset Layer:** Recording ownership of assets, distinguishing between native issuance and tokenized assets.
4. **Platform Layer:** The infrastructure for recording ownership and executing transactions, which may utilize blockchain or non-blockchain technologies.

Industry Trials and Pilots

Project Guardian has seen various industry trials, particularly in the Asset & Wealth Management sector:

Figure 12 Project Guardian: Industry Trials and Pilots in Asset & Wealth Management

Entities	Project	Description
Hamilton Lane & Phillip Securities	Expanding access to Hamilton Lane's Senior Credit Opportunities (SCOPE) Fund.	Phase one involves tokenizing and listing the private credit fund on Alta Exchange, with Phillip Securities supporting the distribution and market making of the tokenized fund. This enables accredited and institutional investors to trade the tokenized fund with enhanced liquidity and market depth. Phase two aims to broaden access to private credit funds, potentially tokenizing a Shariah-compliant fund for the global Islamic fund market.

Deutsche Bank	Developing a full-service fund servicing solution.	In partnership with Memento Blockchain and Interop Labs, the pilot aims to support asset managers' digital fund distribution models and interoperability needs. It includes digital fund creation, permissioning, digital identity, investor ownership, custody, accounting, and cash records across blockchains.
Franklin Templeton	Issuance of a tokenized money market fund.	The pilot explores the issuance through a Variable Capital Company (VCC) structure, utilizing digital asset networks to maintain the records of fund shares. The tokenized fund aims to offer higher security, greater transparency, lower minimum subscription costs, faster processing, and increased efficiencies.
HSBC, Marketnode, and UOB	Issuance and distribution of a digitally native structured product.	The pilot successfully demonstrated the potential for lower issuance and servicing costs, reduced issuance and settlement times, deeper customizability, and broader distribution for participants within the structured product chain. Future pilots aim to issue multi-currency and debt/equity linked structured notes.
J.P. Morgan and Apollo	Seamless investment and ongoing management of discretionary portfolios.	This collaboration demonstrates how tokenization and smart contracts could enable normalized subscription/redemption processing, automated portfolio rebalancing, and customization at scale. The initiative aims to build holistic portfolios across the fragmented landscape of tokenized funds through interoperability solutions.
Schroders and Calastone	Tokenized investment vehicle pilot.	This pilot will securely capture and maintain records of an investment portfolio directly onto distributed ledger technology (DLT)/blockchain. It aims to apply the security attributes inherent in DLT to evolve traditional forms of bookkeeping and demonstrate proof of ownership through tokens.
UBS Asset Management	Native issuance of Variable Capital Company (VCC) fund on digital asset networks.	This initiative aims to enhance fund distribution and facilitate improved secondary market trading of VCC fund shares, realizing industry-wide operational efficiencies. Proof-of-concept technical tests have been successfully conducted with SBI Digital Markets, Swift, and Chainlink Labs.
Swift	Interoperability solution between existing Swift rails and new blockchain rails.	Live trials will identify classic payments triggered from DLT platforms, Delivery-vs-Payment, and Payment-vs-Payment of digital assets related use cases, leveraging existing Swift infrastructure.

Source: Amundi BI

5.2.4 Hong Kong: Project Ensemble Focus

Project Ensemble is an initiative launched by the Hong Kong Monetary Authority (HKMA) aimed at supporting institutional experimentation with tokenization, encompassing both traditional securities and real-world assets (RWA). The initiative seeks to bridge the gap between tokenised assets and money in transactions, fostering a comprehensive tokenisation ecosystem. This project is particularly significant as it explores the integration of a wholesale central bank digital currency (wCBDC) to facilitate interbank settlements involving tokenized deposits. The initiative reflects Hong Kong's ambition to position itself as a leading financial hub in the rapidly evolving landscape of digital assets.

Objectives

The primary objectives of Project Ensemble include:

- Facilitating Tokenization and Promote Tokenised Deposits: To create a framework that allows for the tokenization of various asset classes, enhancing the efficiency and accessibility of financial markets. This includes exploring how traditional financial instruments can be represented as digital assets, thereby improving liquidity and reducing transaction costs. Also focusing on tokenised deposits as digital representations of commercial bank deposits, facilitating their use in tokenised asset transactions.

- Develop Innovative Financial Market Infrastructure to support Interbank Settlements: Utilizing a wholesale CBDC (wCBDC) to enable seamless interbank transactions involving tokenized assets. This aims to streamline processes, reduce settlement times, and enhance the overall efficiency of the financial system.
- Establish Industry Standards & Foster Collaboration: Formulate standards to support interoperability among

Focus Areas

Key focus areas of Project Ensemble encompass:

- **Tokenization of Traditional Securities (i.e. Real-World Assets, RWA):** The project investigates how traditional financial instruments, such as stocks and bonds, can be digitized. This process not only modernizes the trading of these assets but also opens up new avenues for fractional ownership and increased market participation. Beyond traditional securities, Project Ensemble also aims to explore the tokenization of physical assets, such as real estate, commodities, and art. By representing these assets as digital tokens, the initiative seeks to improve liquidity, enable easier transferability, and broaden access to investment opportunities for a wider range of investors.
- **Cross-Border Trading:** Developing frameworks that facilitate the cross-border trading of tokenized assets is a critical focus. This includes addressing regulatory challenges and ensuring compliance with international standards, which is essential for fostering global market integration.

The initial round of experimentation within the Project Ensemble Sandbox covers four main themes:

- Fixed income and investment funds
- Liquidity Management
- Green and sustainable finance
- Trade and supply chain finance

Here are the Industry Trials/Pilots related to Asset & Wealth Management under Project Ensemble:

Figure 13 Project Ensemble: Industry Trials and Pilots in Asset & Wealth Management

Entities	Project	Description
Northern Trust	Testing the tokenization of carbon credits.	Northern Trust has joined Project Ensemble to help develop an experimental framework for the cross-border trading of digital carbon credits. This initiative aims to explore how tokenized carbon credits can be integrated into existing financial systems, potentially creating a more efficient market for carbon trading and supporting sustainability efforts.
Euroclear	Supporting wholesale central bank digital currency (wCBDC) initiative from the Hong Kong Monetary Authority.	Euroclear has joined the Hong Kong Monetary Authority's Project Ensemble to advance the tokenisation ecosystem in Hong Kong. As a member of the Architecture Community, Euroclear will develop interoperability standards for central bank money and tokenised assets, supporting the wholesale central bank digital currency (wCBDC) initiative. This collaboration aims to enhance market growth and innovation in the region.

China Asset Management (ChinaAMC) and OSL Digital Securities	Tokenised Fund Initiative for Retail Investors	China Asset Management (ChinaAMC) and OSL Digital Securities have launched a tokenized money market fund, aimed at retail investors in Hong Kong. **This fund, which raised a record $110 million at launch, is part of the HKMA's Project Ensemble initiative to enhance the tokenization ecosystem.** The fund allows for on-chain transactions, providing investors with real-time monitoring of pricing and ownership. It targets high-quality, short-term deposits and money market instruments. Mininum subscription : Class A HKD : 10 HKD / Class A USD : 1 USD / Class A RMB : 10 RMB
Franklin Templeton and OSL Digital Securities	Tokenised Fund Initiative for Retail Investors	Various financial institutions are collaborating under Project Ensemble to explore the practical applications of tokenization. These collaborations include partnerships with technology providers to develop the necessary infrastructure for supporting tokenized assets and ensuring compliance with regulatory requirements.
HashKey Group & Bosera AM	Tokenized ETF	HashKey Group is participating in the Project Ensemble to advance the tokenization of real-world assets. Concurrently, the project supports the launch of the world's first tokenized money market exchange-traded funds (ETFs) by Bosera Asset Management. These ETFs, which leverage blockchain technology to improve transparency and operational efficiency, allow investors to gain direct exposure to high-quality money market instruments, thereby fulfilling their asset allocation and risk management needs in a more accessible manner.

Source: Amundi BI

6 Market & Revenues: The Trillions Will Come, Eventually

We estimate the tokenized fund market size at approximately $10 billion as of the end of May 2025, using data provided by data vendors compiling tokenized fund assets on public blockchains as well as our own mapping of tokenized funds worldwide. Private blockchain funds are most often hybrid funds offering both unchain and offchain subscriptions and do not offer transparency on their onchain AUM and consequently cannot be tracked properly. Whereas the absence of private blockchain funds in our analysis probably underestimates the market, we reckon public blockchain fund AUM and flows are a good estimation of the real appetite for tokenised fund assets from digitally native investors, both institutional or retail. The bulk of tokenized fund assets remain in money market funds.

This $10 billion figure is tiny in comparison to the global public fund markets of €61.2 trillion and to the global asset management industry overseeing $128 trillion worldwide. Market size forecasts by consultants vary widely depending on the methodology used, but the two most widely cited and credible studies from BCG and McKinsey estimate the market size to be anywhere between $300 billion and $1.3 trillion by 2030, depending on the chosen scenario. **Amundi BI's conservative scenario is$30bn in tokenized fund assets by 2030, assuming a CAGR of 25% per year. The consensus scenario puts the market at $600bn in 2030.**

Using a mix of tokenized fund market size from external market analysts and our own estimate of the market, we evaluate the **possible annual net revenue opportunity for the asset management industry at approximately $4bn by 2030**, assuming that approximately half of the tokenized fund assets are invested in higher margin products, including private market funds. By comparison, the net revenues of the asset management industry currently amount to approximately $310 bn according to the BCG's Global Asset Management Report. For the asset management industry, assuming the same revenues in 2030, this means that approximately 1% of its revenue could come from tokenized funds in 2030, which is a relatively modest proportion.

Figure 14 Market Size Projections and Revenue Opportunity

Source	Scenario	Tokenized AUM$ bn, 2030	% Global Mutual Fund Market	% Global Crypto Market	Net Revenue*, $bn (0,25% net revenue margin)	Net Revenue*, $bn (1,00% net revenue margin)
Amundi BI	1-Conservative	30	0,05%	1,10%	0,08	0,30
Amundi BI	2-Neutral	120	0,20%	4,41%	0,30	1,20
Amundi BI	3-Bullish	300	0,49%	11,03%	0,75	3,00
BCG	1-Conservative	600	0,98%	22,06%	1,50	6,00
BCG	2-Neutral	1000	1,64%	36,76%	2,50	10,00
BCG	3-Bullish	1300	2,13%	47,79%	3,25	13,00

McKinsey	1-Conservative	300	0,49%	11,03%	0,75	3,00
McKinsey	2-Neutral	600	0,98%	22,06%	1,50	6,00
McKinsey	3-Bullish	1200	1,97%	44,12%	3,00	12,00
	Average	**606**		*Average*	**1,51**	**6,06**
				Average	**3,78**	

Source : Amundi BI / BCG / McKinsey

In terms of cost, the most credible reports suggest that fund tokenization does not significantly lower the overall processing cost of fund distribution. This view aligns with feedback from our interviews with Amundi's stakeholders and technology vendors. This muted cost impact is explained by the expected coexistence of onchain and offchain operational processes for a considerable period. As well, fund managers lacking the in-house skills and resources needed to maintain and oversee the technological systems required for tokenization will need to hire in-house staff with the right qualifications and contract with new technology providers.

6.1 Market Size

6.1.1 Current

According to data from RWA, a platform specializing in tracking tokenized funds on public blockchains, the market for tokenized funds is estimated to have reached nearly $10 billion by the end of May 2025. The market remains heavily concentrated in specific asset classes and dominated by a few major players.

The growth trajectory of the tokenized fund market has accelerated recently. Starting with $1 billion in March 2024, the market doubled to $2 billion by August 2024, and then doubled again to $4 billion by December 2024. By May 2025, the market had more than doubled once more, nearing the $10 billion milestone. However, this rapid expansion is largely attributable to the dominance of a few key players, rather than a broad-based diversification of market participants.

Funds that have been tokenized but that trade on private blockchains are out of scope of this sizing given the lack of data on this sub-market. The tokenized fund flow figures of such funds are indistinguishable from the offchain fund flows. Besides, the DLT distribution of such funds seems to have been limited to closed fund marketplaces such as IZNES or FundsDLT, and their offchain nature makes them unlikely to be fully fit for the full onchain use cases, including continuous trading via secondary market and faster settlement.

Yet, we have heard of an impressive figure from one investor into such tokenized share classes, namely **the French branch of Generali, which claims to hold approximately €15bn for the unit-linked insurance policies of its clients out of total assets under management for its French life insurance operation of €250bn.** Such investments are made using the IZNES platform, a DLT-based fund transaction platform with Generali as one of its main shareholders.

As explained by a Generali representative during a Tokenization conference, the main reasons for these investments are the enhanced efficiency in the processing of the trade.[10] Yet, we believe that trades performed this way do not represent a new market and would have been realized offchain *but* for Generali's insistence with asset managers referenced on its life insurance contract to make at least one share class available in a tokenized format on the IZNES platform.[11] We are not aware of investments made outside of the IZNES platform for these tokenized funds. Similarly, funds subject to tokenization by FundsDLT, including Ostrum's money market fund range available for subscription using FundsDLT via Natixis IM client portal, are not included in our sizing.[12]

6.1.2 Forecast

Market size forecast by consultants and researchers vary widely depending on the methodology used, but the two most widely cited and credible studies from BCG and McKinsey point to a market size anywhere between $300 billion and over $1 trillion by 2030.

These amounts can be considered relatively small compared to the size of the funds & ETF market at approximately 2% of the total in the high range, or quite high when converting these figures into a growth metric. **Reaching such a considerable amount by 2030 translates into a CAGR exceeding 150%, far surpassing the natural long-term organic growth rate of the fund markets worldwide, which hovers around 3%.**

We believe that achieving such an impressive growth would require the presence of several key enablers of growth, including the possibility to settle directly in digital currencies and to engage in peer-to-peer trading that could foster the development of a secondary market for tokenized funds. However, it seems unlikely that regulatory and capital markets developments will progress quickly and substantially enough to power such growth.

In the short to medium- term, and probably up to 2030, we expect the market for tokenized fund assets to continue to grow at its current pace of approximately 25% annually. This market growth rate, observed from 2022 to 2024 and computed by the BCG, aligns closely with that observed on databases such as RWA. **Assuming no significant regulatory changes that would facilitate investments by digital investors into tokenized funds, the market could reach approximately €30 billion by 2030.**

Some recent market research studies have been even more bullish. According to Bain, the tokenization of alternative assets could eventually generate substantial flows of up to $12tn, as high-net-worth investors with better tokenized market access could diversify 15-20% of their portfolio into alternatives. However, we consider this estimation to be very bullish as it assumes a private market diversification of wealth investors aligned with the asset allocation of institutions.

Beyond 2030, and assuming favorable market and regulatory developments incentivizing cryptocurrency holders to diversify away from cryptos and into real-world

[10] Tokenising Funds: the case for Money Market and Linked Fund (EFAMA Conference), Rémi Cuinat, Generali France

[11] Various fund managers (50 according to Generali) referenced on the IZNES DLT distribution fund platform proposes tokenized fund shares for their France-domiciled funds. For an example of such tokenization, see Carmignac Sécurité's prospectus.

[12] Ostrum has delegated to FundsDLT the onchain issuance and register functions of its offchain money market funds (Ostrum SRI Cash Plus; Euro Liquidy LVNAV; Cash; Money; Money 6M; Money Plus)

assets as their portfolios and wealth mature, we believe it is realistic that tokenized fund AUM could surpass the €1 trillion mark.

Figure 15 Market Forecast Projections

Source	Scenario	Tokenized AUM$ bn, 2030	% Global Mutual Fund Market
Amundi BI	1-Conservative	30	0,05%
Amundi BI	2-Neutral	120	0,20%
Amundi BI	3-Bullish	300	0,49%
BCG	1-Conservative	600	0,98%
BCG	2-Neutral	1000	1,64%
BCG	3-Bullish	1300	2,13%
McKinsey	1-Conservative	300	0,49%
McKinsey	2-Neutral	600	0,98%
McKinsey	3-Bullish	1200	1,97%
	Average	**606**	

Source : Amundi BI / BCG / McKinsey

6.2 Industry Cost: Will Likely Go Up Before It Goes Down

We reviewed various market surveys from technology vendors, banking institutions, as well as international organizations to determine whether the market expects fund tokenization to yield a reduction in the cost of fund distribution operations. **The most credible reports suggest that fund tokenization does not significantly lower the processing cost of fund distribution yet. This view aligns with feedback from our interviews with Amundi's stakeholders and technology vendors.**

In particular, the World Economic Forum's 2025 report on asset tokenization finds limited evidence that tokenized funds significantly reduce costs, such as fund administrator fees, compared to conventional funds. This report is based on desk research encompassing over 75 industry reports, interviews with more than 60 experts representing public and private sector stakeholders, and community workshops conducted worldwide.

This contrasts with the views from providers of tokenization services who are much more bullish with respect to the potential of operating cost reduction for asset managers. For instance, Calastone, a provider of fund distribution technology and now a provider of tokenization services, conducted a survey of 26 asset managers suggesting that overall fund processing costs currently amount to 0.74% of the surveyed fund managers' assets. **According to Calastone, by implementing tokenization and deploying distributed ledger technology (DLT), asset managers could potentially achieve savings of 23% in operating costs, equivalent to 0.13% of AUM.**

Various factors explain that the impact on costs for the fund industry, despite the theoretical operational efficiency gains, will likely be muted, at least in the medium term. **First off, onchain and offchain fund distribution processes are expected to coexist for a considerable period.** This hybrid environment limits the full realization of cost savings because many processes still depend on traditional intermediaries and manual reconciliation, thereby reducing the efficiency gains that tokenization could potentially offer.

Secondly, fund managers generally lack the in-house skills and resources needed to maintain the advanced technological systems required for tokenization. Consequently, they need to contract external technology providers, resulting in significant initial costs. Moreover, the use of digital custodians to manage cryptographic keys further increases operational expenses. These technological and setup costs can offset some of the savings that automation and blockchain efficiencies might bring, particularly in the short term.

In addition, the **regulatory framework** surrounding tokenized funds is still evolving, requiring additional time and resources to engage with regulators and adapt the process according to the evolving regulatory environment. This adds to the short-term costs and complexity of implementing tokenization.

6.3 Industry Revenue: Diversification Into Private Assets to Drive Growth

Fund tokenization is expected to increase the revenue of the asset management industry primarily by enlarging the investor base, both by giving access to traditional investors to new products (the private market democratization play) and by winning over new onchain investors (the digital native investor play). As time passes onchain and offchain distribution mingles together, these revenues will likely increasingly come from the migration of offchain investors to onchain investing.

By leveraging blockchain technology and tokenization, fund managers can lower investment minimums and expand distribution to new investor segments, including eligible individuals who previously had limited access to alternatives. This broader investor base can lead to increased assets under management (AUM), which subsequently drives higher management fees and carried interest revenues for fund managers. **Based on our 2030 market size estimates, it seems reasonable to expect additional revenue of approximately €4bn per year for the global asset management industry by 2030.**

Figure 16 Projected Revenue Impact on the AM Industry by 2030

Source	Scenario	Net Revenue*, €BN (0,25% net revenue margin)	Net Revenue*, €BN (1,00% net revenue margin)

Amundi BI	1-Conservative	0,08	0,30
Amundi BI	2-Neutral	0,30	1,20
Amundi BI	3-Bullish	0,75	3,00
BCG	1-Conservative	1,50	6,00
BCG	2-Neutral	2,50	10,00
BCG	3-Bullish	3,25	13,00
McKinsey	1-Conservative	0,75	3,00
McKinsey	2-Neutral	1,50	6,00
McKinsey	3-Bullish	3,00	12,00
Average		**1,51**	**6,06**
		3,78	

Source : Amundi BI / BCG / McKinsey

The most important drivers of revenue growth from fund tokenization include:

- **Expanded Investor Base:** Tokenization enables more widespread adoption of alternative investments by making private markets more accessible to a larger pool of investors, increasing the addressable market significantly.
- **Increased Assets Under Management:** With more investors participating, fund managers can attract more capital, boosting AUM and associated fee revenues.
- **New Revenue Streams:** Secondary trading of tokenized funds and collateralized lending of tokens can generate additional fees and interest income.

Figure 17 Key driver of DLT and digital asset investments (% of respondents citing each, 2023-2025)

Source: DLT in the Real World 2025 (The Value Xchange)

6.4 Return on Investments: CASA Digital Assets ROI Benchmark Study

In this section, we summarize the work carried out by Accenture, as part of the Digital Assets Market study sponsored by CASA.[13] Accenture projects a cost of €5 million for **security tokens distribution via third parties[14]**, and a 5-year ROI[15] of €33 million to €176 million.

The variation depends on whether a partnership is established with a service provider or a technology provider, and on whether this offering targets existing clients only or includes new clients. This market is shared between CACIB and Amundi. To launch this offer in 1 year, the report states that Amundi and CACIB could either partner with a service provider (like Spiko or Securitize), with an internal team of 10-20 people, or partner with technology partners (i.e. Taurus, Moreliquid), with a internal team of 20-50 people.

Accenture projects that a leading asset manager distributing security tokens via third parties could achieve €3 billion in net new inflows in the EU by 2025. This figure represents a 10% market share of a €30 billion global tokenized assets estimate for FY2025. We note that the €30 billion figure includes a broad range of tokenized assets (equities, bonds, private assets, intellectual property, digital native assets like NFTs and cryptocurrencies), making it a large-scale proxy benchmark for measuring the potential of tokenized funds specifically.

By our account, current market size for tokenized funds is closer to €10 billion globally. Assuming the EU accounts for roughly 10% of this market, the EU *tokenized* funds market would be about €1 billion. If a leading asset manager captures 80% of the EU tokenized funds market, this translates to approximately €0.8 billion in net new inflows—almost four times less than Accenture's €3 billion estimate.

In terms of revenues, Accenture assumes a 0.20% management fee on assets under management (Alum), citing it as conservative within a 0.20-0.50% range typical for private asset funds.

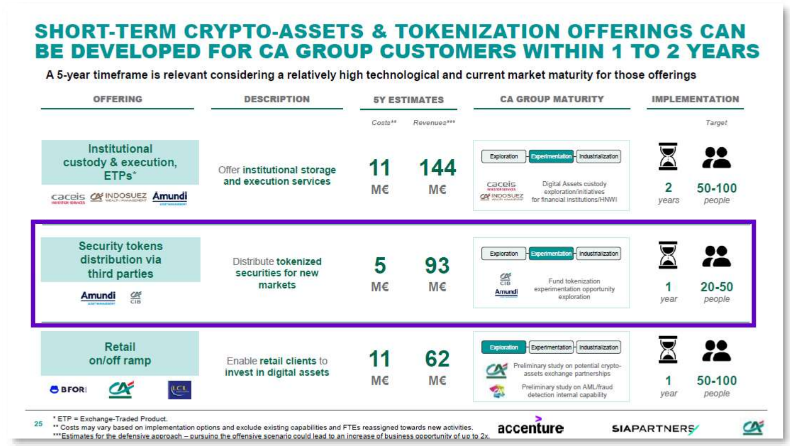
Figure 18 CASA Digital Assets ROI Benchmark (Accenture) 2024 07

[13] CASA Digital Assets ROI Benchmark, 2024 07, Accenture SIA. Internal Document.

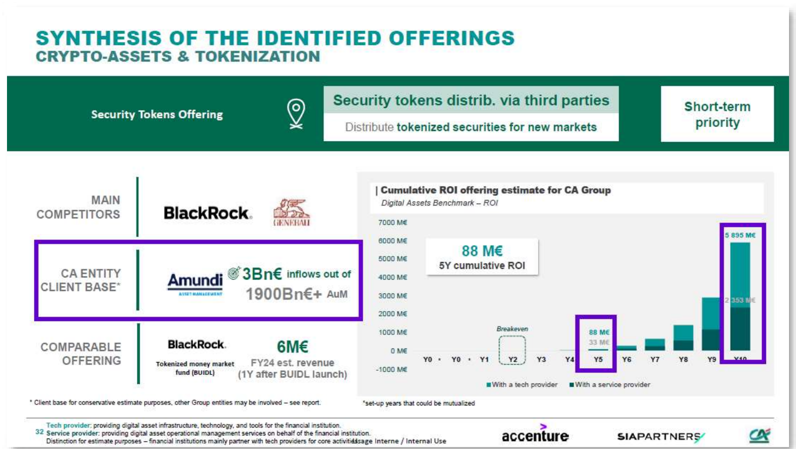
[14] The "security tokens distribution via third parties" corresponds to the scope of this research project

[15] ROI "Return On Investments" corresponds to the Net Revenue (Revenue – Cost)

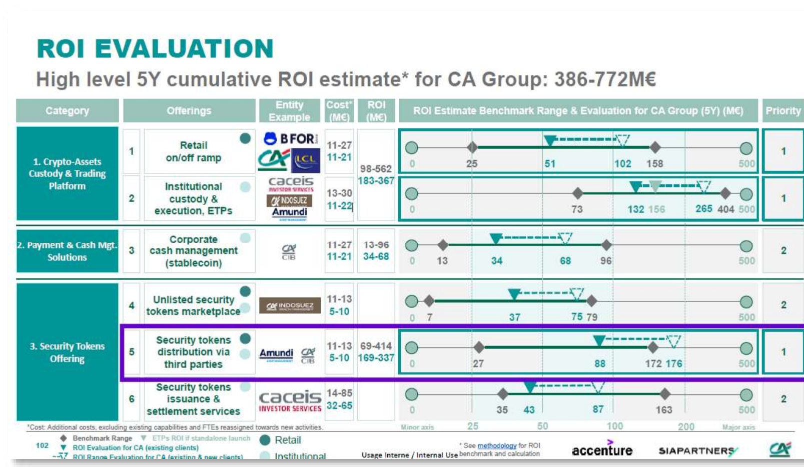
*The **cost** of generating cumulated revenues of €93m over 5 years is estimated at **€5m** over 5 years, distributing tokenized securities for new markets, with a team of 20 to 50 people (Tech. partnership).* *(p.25)*



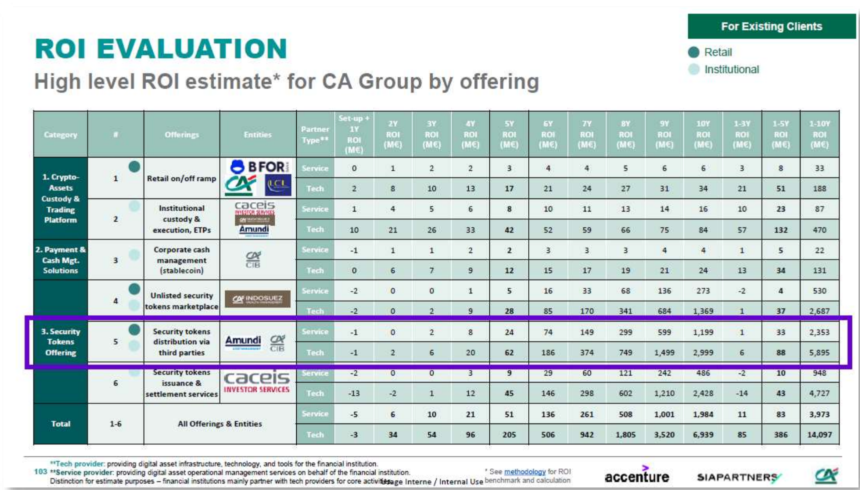
*The estimated €88m net revenues (€93m - €5 m) assume **inflows** of **€3bn** into tokenized products managed by Amundi **over 5 years**.* *(p.32)*



*Net revenues (ROI) from existing clients from the Security Tokens Distribution via Third Parties is estimated at €88M over 5 years for existing clients. **Taking into account new clients, net revenues are estimated at €176M.*** *(p.102)*



Partnering with a service provider yields lower net revenues given that the service (i.e. distribution) partners retain 80% of the management fees. A technology partner retains 20% of the management fees. For existing clients, ROI based on a tech partnership only is almost x3 the one based on a service partnership (€24M vs €62M) (p.103)



ROI EVALUATION

High level ROI estimate* for CA Group by offering

For Existing Clients

Retail

Institutional

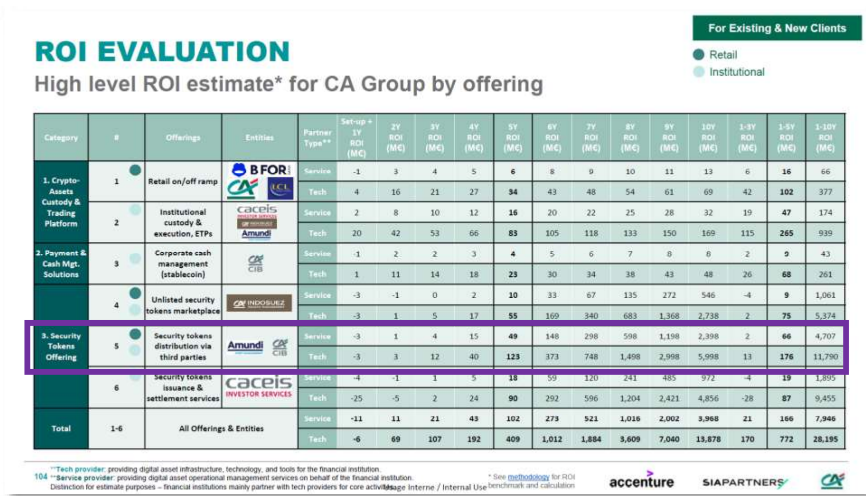
Category	#	Offerings	Entities	Partner Type**	Set-up + 1Y ROI (M€)	2Y ROI (M€)	3Y ROI (M€)	4Y ROI (M€)	5Y ROI (M€)	6Y ROI (M€)	7Y ROI (M€)	8Y ROI (M€)	9Y ROI (M€)	10Y ROI (M€)	1-3Y ROI (M€)	1-5Y ROI (M€)	1-10Y ROI (M€)
1. Crypto-Assets Custody & Trading Platform	1	Retail on/off ramp	BFOR, CA, LCL	Service	0	1	2	2	3	4	4	5	6	6	3	8	33
				Tech	2	8	10	13	17	21	24	27	31	34	21	51	188
	2	Institutional custody & execution, ETPs	caceis, Indosuez, Amundi	Service	1	4	5	6	8	10	11	13	14	16	10	23	87
				Tech	10	21	26	33	42	52	59	66	75	84	57	132	470
2. Payment & Cash Mgt. Solutions	3	Corporate cash management (stablecoin)	CA CIB	Service	-1	1	1	2	2	3	3	3	4	4	1	5	22
				Tech	0	6	7	9	12	15	17	19	21	24	13	34	131
3. Security Tokens Offering	4	Unlisted security tokens marketplace	CA Indosuez	Service	-2	0	0	1	5	16	33	68	136	273	-2	4	530
				Tech	-2	0	2	9	28	85	170	341	684	1,369	1	37	2,687
	5	Security tokens distribution via third parties	Amundi, CA CIB	Service	-1	0	2	8	24	74	149	299	599	1,199	1	33	2,353
				Tech	-1	2	6	20	62	186	374	749	1,499	2,999	6	88	5,895
	6	Security tokens issuance & settlement services	caceis Investor Services	Service	-2	0	0	3	9	29	60	121	242	486	-2	10	948
				Tech	-13	-2	1	12	45	146	298	602	1,210	2,428	-14	43	4,727
Total	1-6	All Offerings & Entities		Service	-5	6	10	21	51	136	261	508	1,001	1,984	11	83	3,973
				Tech	-3	34	54	96	205	506	942	1,805	3,520	6,939	85	386	14,097

**Tech provider: providing digital asset infrastructure, technology, and tools for the financial institution.
103 **Service provider: providing digital asset operational management services on behalf of the financial institution.
Distinction for estimate purposes – financial institutions mainly partner with tech providers for core activities Usage Interne / Internal Use

* See methodology for ROI benchmark and calculation

accenture SIAPARTNERS

Partnering with a service provider yields lower net revenues given that the service (i.e. distribution) partners retain 80% of the management fees. A technology partner retains 20% of the management fees. For existing and new clients, ROI based on a tech partnership only is almost 2.5x the one based on a service partnership (€49M vs €123M) (p.104)



ROI EVALUATION

High level ROI estimate* for CA Group by offering

For Existing & New Clients

Retail

Institutional

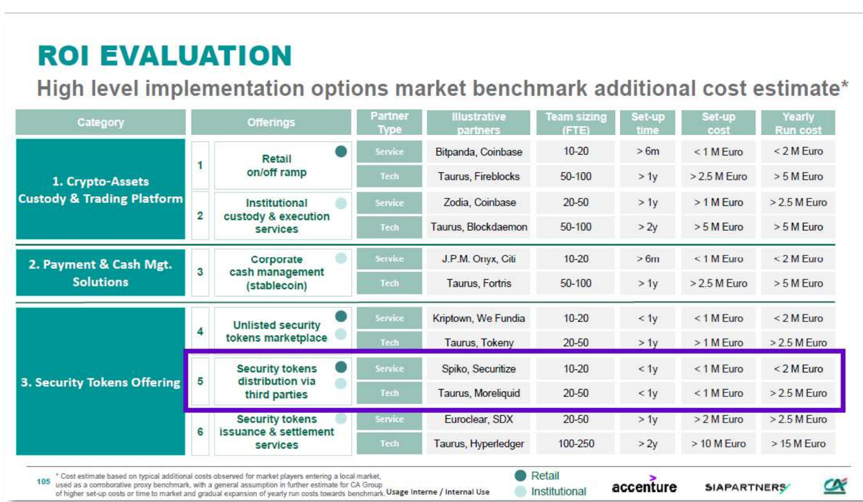
Category	#	Offerings	Entities	Partner Type**	Set-up + 1Y ROI (M€)	2Y ROI (M€)	3Y ROI (M€)	4Y ROI (M€)	5Y ROI (M€)	6Y ROI (M€)	7Y ROI (M€)	8Y ROI (M€)	9Y ROI (M€)	10Y ROI (M€)	1-3Y ROI (M€)	1-5Y ROI (M€)	1-10Y ROI (M€)
1. Crypto-Assets Custody & Trading Platform	1	Retail on/off ramp	BFOR, CA, LCL	Service	-1	3	4	5	6	8	9	10	11	13	6	16	66
				Tech	4	16	21	27	34	43	48	54	61	69	42	102	377
	2	Institutional custody & execution, ETPs	caceis, Indosuez, Amundi	Service	2	8	10	12	16	20	22	25	28	32	19	47	174
				Tech	20	42	53	66	83	105	118	133	150	169	115	265	939
2. Payment & Cash Mgt. Solutions	3	Corporate cash management (stablecoin)	CA CIB	Service	-1	2	2	3	4	5	6	7	8	8	2	9	43
				Tech	1	11	14	18	23	30	34	38	43	48	26	68	261
3. Security Tokens Offering	4	Unlisted security tokens marketplace	CA Indosuez	Service	-3	-1	0	2	10	33	67	135	272	546	-4	9	1,061
				Tech	-3	1	5	17	55	169	340	683	1,368	2,738	2	75	5,374
	5	Security tokens distribution via third parties	Amundi, CA CIB	Service	-3	1	4	15	49	148	298	598	1,198	2,398	2	66	4,707
				Tech	-3	3	12	40	123	373	748	1,498	2,998	5,998	13	176	11,790
	6	Security tokens issuance & settlement services	caceis Investor Services	Service	-4	-1	1	5	18	59	120	241	485	972	-4	19	1,895
				Tech	-25	-5	2	24	90	292	596	1,204	2,421	4,856	-28	87	9,455
Total	1-6	All Offerings & Entities		Service	-11	11	21	43	102	273	521	1,016	2,002	3,968	21	166	7,946
				Tech	-6	69	107	192	409	1,012	1,884	3,609	7,040	13,878	170	772	28,195

**Tech provider: providing digital asset infrastructure, technology, and tools for the financial institution.
104 **Service provider: providing digital asset operational management services on behalf of the financial institution.
Distinction for estimate purposes – financial institutions mainly partner with tech providers for core activities Usage Interne / Internal Use

* See methodology for ROI benchmark and calculation

accenture SIAPARTNERS

Examples of tech providers include Taurus, Tokeny, and service providers (i.e. distributor) include Spiko, Securitize. Working with technology provider only requires larger internal teams. (p.105)



ROI EVALUATION

High level implementation options market benchmark additional cost estimate*

Category	#	Offerings	Partner Type	Illustrative partners	Team sizing (FTE)	Set-up time	Set-up cost	Yearly Run cost
1. Crypto-Assets Custody & Trading Platform	1	Retail on/off ramp	Service	Bitpanda, Coinbase	10-20	> 6m	< 1 M Euro	< 2 M Euro
			Tech	Taurus, Fireblocks	50-100	> 1y	> 2.5 M Euro	> 5 M Euro
	2	Institutional custody & execution services	Service	Zodia, Coinbase	20-50	> 1y	> 1 M Euro	> 2.5 M Euro
			Tech	Taurus, Blockdaemon	50-100	> 2y	> 5 M Euro	> 5 M Euro
2. Payment & Cash Mgt. Solutions	3	Corporate cash management (stablecoin)	Service	J.P.M. Onyx, Citi	10-20	> 6m	< 1 M Euro	< 2 M Euro
			Tech	Taurus, Fortris	50-100	> 1y	> 2.5 M Euro	> 5 M Euro
3. Security Tokens Offering	4	Unlisted security tokens marketplace	Service	Kriptown, We Fundia	10-20	< 1y	< 1 M Euro	< 2 M Euro
			Tech	Taurus, Tokeny	20-50	> 1y	> 1 M Euro	> 2.5 M Euro
	5	Security tokens distribution via third parties	Service	Spiko, Securitize	10-20	< 1y	< 1 M Euro	< 2 M Euro
			Tech	Taurus, Moreliquid	20-50	< 1y	< 1 M Euro	> 2.5 M Euro
	6	Security tokens issuance & settlement services	Service	Euroclear, SDX	20-50	> 1y	> 2 M Euro	> 2.5 M Euro
			Tech	Taurus, Hyperledger	100-250	> 2y	> 10 M Euro	> 15 M Euro

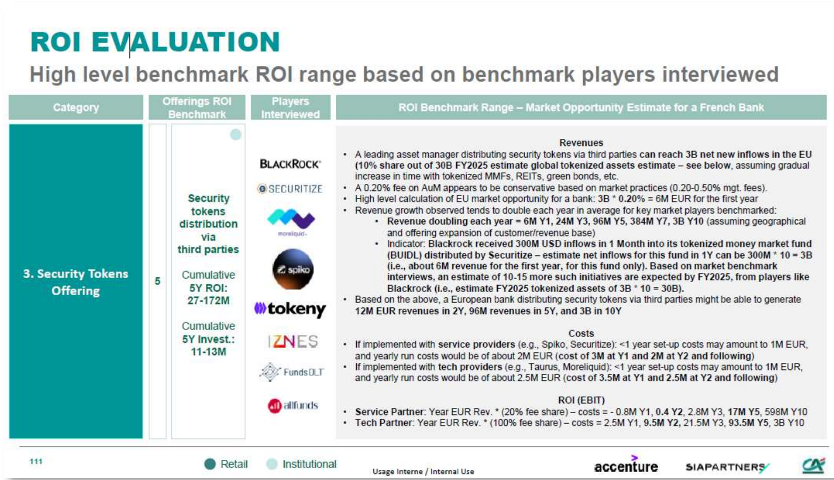
105 * Cost estimate based on typical additional costs observed for market players entering a local market, used as a corroborative proxy benchmark, with a general assumption in further estimate for CA Group of higher set-up costs or time to market and gradual expansion of yearly run costs towards benchmark. Usage Interne / Internal Use

Retail

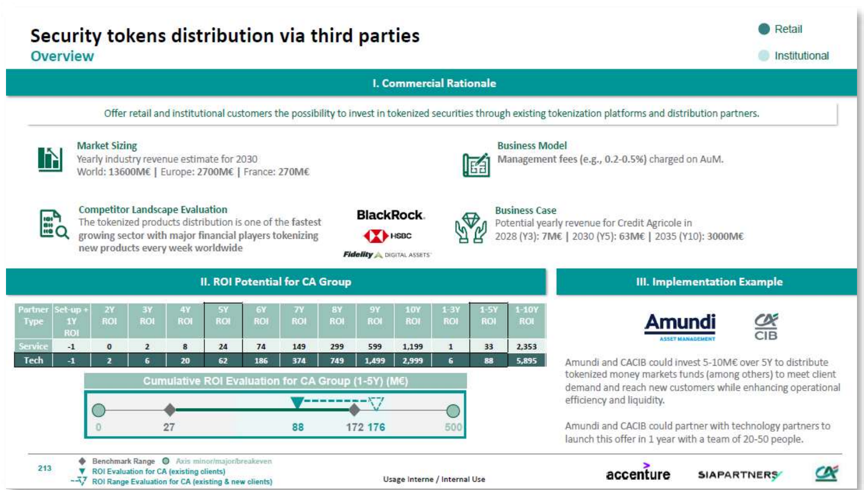
Institutional

accenture SIAPARTNERS

Inflows for a leading asset manager are estimated at €3bn, within a market estimated at €30bn worldwide, representing a 10% market share. Net revenues depend essentially on whether the partnership is tech only or with a service provider. Service providers are assumed to retain an 80% fee share. Management fees of 20 bps. (p.111)

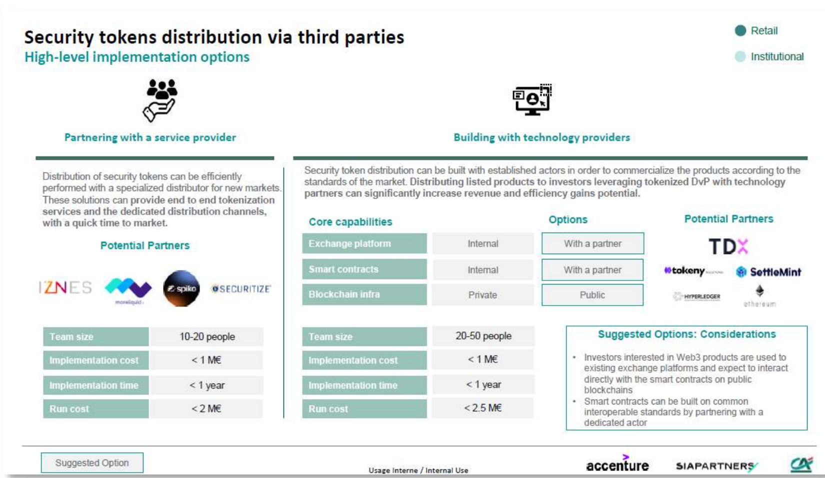


Amundi and CACIB could invest 5-10M€ over 5Y to distribute tokenized money markets funds (among others) to meet exiting clients' demand and reach new customers while enhancing operational efficiency and liquidity. (p.213)

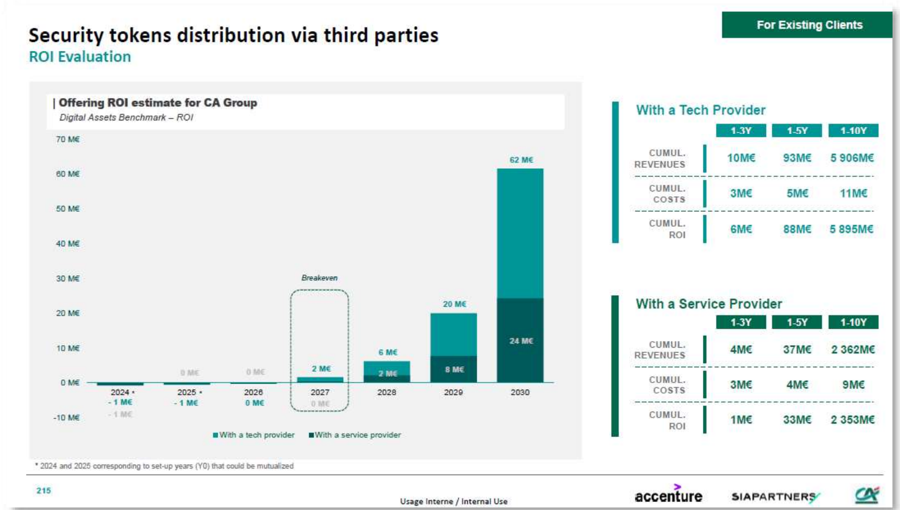
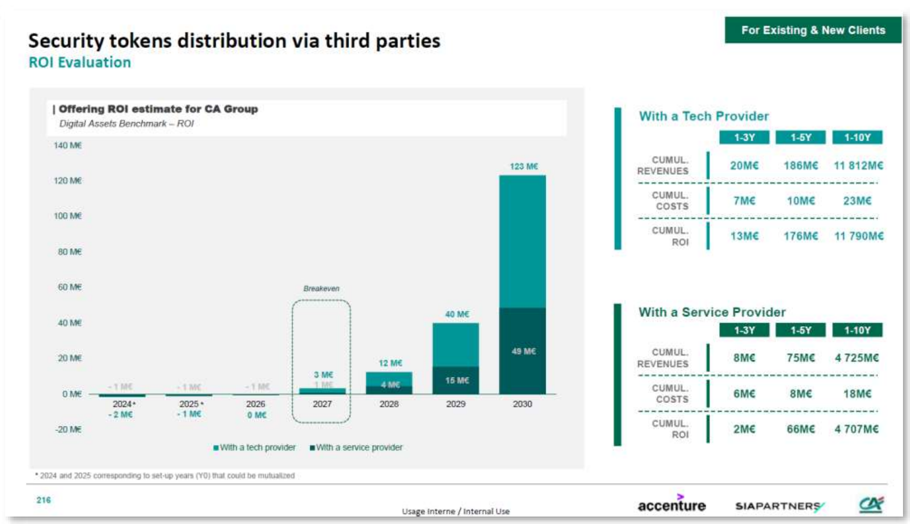


Partner Type	Set-up + 1Y ROI	2Y ROI	3Y ROI	4Y ROI	5Y ROI	6Y ROI	7Y ROI	8Y ROI	9Y ROI	10Y ROI	1-3Y ROI	1-5Y ROI	1-10Y ROI
Service	-1	0	2	8	24	74	149	299	599	1,199	1	33	2,353
Tech	-1	2	6	20	62	186	374	749	1,499	2,999	6	88	5,895

v



*The distribution of security tokens can be efficiently performed with a **specialized distributor for new***	*Security token distribution can be built with established **technology** actors in order to*

<table>
<tr><td>markets. These solutions can provide end to end tokenization services and dedicated distribution channels, with a quick time to market. (p.214)</td><td>commercialize the products according to the standards of the market. Distributing listed products to investors leveraging tokenized Delivery versus Payment (DvP) with technology partners can significantly increase revenue and efficiency gains potential. (p.214)</td></tr>
<tr><td>Over 5 years, cumulated net revenues (ROI) of €88M for existing clients under a technology partnership only approach. €33M under a service approach. (p.215)</td><td>
</td></tr>
<tr><td>Over 5 years, cumulated net revenues (ROI) of €176M for existing & new clients under a technology partnership only approach. €66M under a service approach. (p.216)</td><td>
</td></tr>
<tr><td colspan="2">Source: CASA Digital Assets ROI Benchmark (Accenture) 2024 07</td></tr>
</table>

7 Distribution: The Digital Native Thesis

While operational efficiency gains and cost reduction through automation for the asset management industry are often presented as key advantages of fund tokenization, this perspective is an inward-looking one and probably overlooks the real consumer use case, and where this consumer use case is likely to materialize first.

Going forward, investors that will probably find the most value in the tokenized asset management offering of fund managers are the digital native ones, which are more likely to be based in Asia given the spread of cryptocurrencies in that region of the world. The total value of the crypto (including stablecoin) today varies between \$3 and \$4 trillion, concentrated in a handful of crypto (Bitcoin, Ether) and stablecoin (USDC, USDT). A portion of these growing assets will migrate to real world assets as digital native investors either derisk and diversify their holdings. For now, most of the growth in tokenized fund assets so far has been driven by professional investments from the DeFi companies in the US so far, something that could be replicated in other regions of the world.

As for offchain fund shares, managers have various options to choose from when choosing how to distribute a tokenized fund (marketplace B2B, D2C, B2C), but with new actors including digital distributors habilitated to distribute both tokenized financial securities and cryptocurrencies. Depending on the chosen distribution channel (which will depend in large part on the structure of the tokenized funds, i.e. essentially native or hybrid), the potential to target digitally native investors in the long term will vary.

Overall, the current investor base for tokenized fund assets is currently biased towards professional investors given the private (i.e. exempt from registration) nature of some dominant US tokenized funds, as well as the relatively limited distribution outlet for tokenized funds. Only a handful of large-scale tokenized funds are directly available to retail investors today, including in the US the Franklin Onchain U.S. Government Money Fund (BENJI) and the WisdomTree Government Money Market Digital Fund (WTGXX). In Europe, the best-known examples of directly distributed funds are Spiko's Euro and USD money market funds.

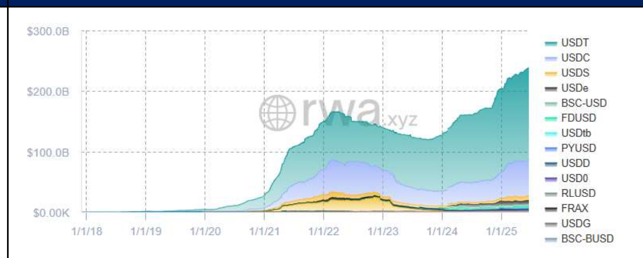
For asset managers, at least in the short term, the real distribution business boost from the onchain world may come from getting access to cryptocurrency exchange, which now generally benefit from a clearer and more straightforward regulatory framework in Europe (MiCA), as well as in various Asian jurisdictions (Singapore: Payment Service Act "PSA"; Hong Kong: Licensing Regime for Virtual Asset Trading Platforms; Malaysia: Digital Assets Framework).

For now, the development of tokenized fund distribution on centralized crypto exchange is limited in large part by the impediments to the development of a secondary market for tokenized fund assets and the need for such exchange to obtain the right license as investment firm allowed to distribute financial securities.

7.1 The Digital Flywheel Effect

Our positive fund tokenization thesis mostly relies on the growth of the digital native investors who will increasingly rely on digital assets as they initiate their journey in the investment and savings world. A good point of departure is the market capitalization of the two largest cryptocurrencies, Bitcoin and Ethereum, at over €2 trillion. The market capitalization of the two largest stablecoins, Tether's USDT and Circle's USDC is about €200 billion. While the former are highly volatile, the latter do not pay any income. This leaves room for a middle ground that can be filled by tokens linked to managed portfolios. Tokenized funds from reputable asset management companies are one such option.

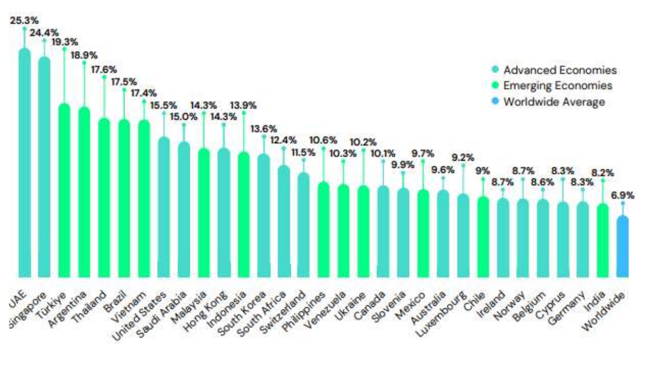
Figure 19 Market Capitalization of Cryptocurrency and Stablecoins

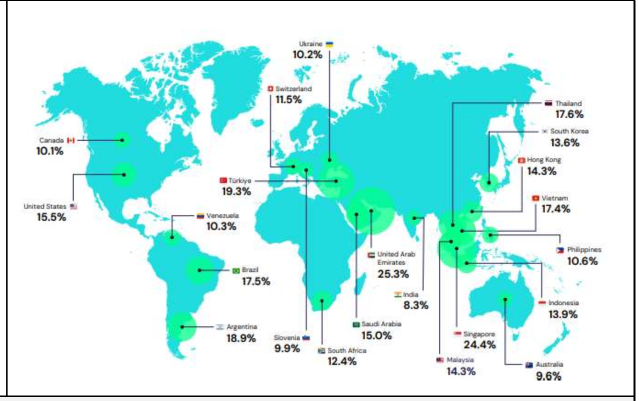
Crypto Market Cap	Stablecoin Market Cap
	
Source: Coingecko	*Source: RWA*

According to recent analysis from Triple A, a crypto payment service firm, 6.8% of the global population owned crypto in 2024. That's 562 million people worldwide. The figure is up 33% from the previous year, when it was reported that 420 million people owned crypto. Owners of crypto are relatively young, with 34% of the crypto owners in the 24 to 35 year-old age group, the highest adoption rate amongst all age groups. The country with the highest cryptocurrency ownership is the United Arab Emirates, where over a quarter of the population own crypto, followed by Singapore, with an ownership rate of 24,4%.

Other major Asian economies with a particular high rate of crypto ownership include Thailand with 17,6% and Hong Kong with 14,3%. All in all, Asia represents by far the largest crypto market in terms of the numbers of crypto owners: 58% of crypto owners worldwide are found in Asia for a total of 327 million people according to the statistics from Triple A. Even though the crypto amounts controlled by Asian investors may not be as high as the crypto amounts detained by North American investors given the wealth differentials, **this represents a huge pool of investors that have already set up a digital wallet and that are potentially ready for more onchain investments, eventually in funds.**

Figure 20 Top 30 Countries With the Highest Cryptocurrency Ownership Rate in 2024





Source: Triple A, Chainanalysis. Number of owners in millions.

Figure 21 Crypto Ownership by Continent[16]

	2023	2024	% Total, 2024	% change
Asia	268.2M	326.8M	58%	21.8%
North America	52.1M	72.2M	13%	38.6%
Africa	40.1M	43.5M	8%	8.5%
Europe	30.7M	49.2M	9%	60.3%
South America	25.5M	55.2M	10%	116.5%
Oceania	1.4M	3.0M	1%	114.3%
Total	420M	562M	100%	33%

Source: Triple A, Chainanalysis

Crypto readiness is of the utmost importance in choosing the market for developing a product if we assume that traditional investors have a limited understanding of cryptos and of tokenized products, the technology, and navigating processes, such as learning about token-specific characteristics, managing wallets, storage of private keys, and usability. Consequently, unless fully simplified by an investment intermediary, the on-chain investment process may appear as a daunting task for an off-chain investor. Investors that are the most likely to proactively invest in tokenized fund assets are the ones that will be most familiar with the crypto environment, and for which the learning curve for token investing will be the shorter.

[16] Nr. of individuals owning crypto.

7.2 DLT Distribution Routes

As for traditional fund shares, fund managers have various options to choose from when choosing how to distribute a tokenized fund. These options are by and large similar to the ones in the offchain world, but with new actors including digital distributors habilitated to distribute both tokenized financial securities and cryptocurrencies (which are generally not considered as financial securities[17]). Depending on the chosen distribution channel—which will depend in large part on the structure of the tokenized funds, i.e. essentially native or hybrid—the potential to target digitally native investors in the long term will vary.

The **marketplace B2B approach** focuses on tokenized share transfers between institutional players, as seen with IZNES. This requires asset managers to open accounts with distributors and often to enter exclusive agreements. Such arrangements introduce operational bottlenecks and limit the scalability of tokenized fund distribution across multiple distributors and markets.

Such targeting can be partly achieved through the **Direct Distribution (D2C)** channel, which is currently limited in the off-chain world. The limited tokenized fund distribution venues for asset managers so far, coupled with the operational capabilities enabled by the blockchain technology to process a larger number of accounts directly, have prompted Franklin Templeton (US, Luxembourg) to pursue this approach.

Despite the relative success of Franklin Templeton's money market fund, particularly in the US, we believe that the potential for growth enabled by this approach remains limited and requires a strong brand presence, as well as limited competition to be sustainable in the long term. Another asset manager that has experimented direct distribution is French web 3.0 fund manager Spiko.

The next distribution route is the **Direct Distribution Platform (B2C) Route**, which currently comes in two flavors, either as part of distribution deals with specialized DLT-based digital asset distributors such as Securitize in the US (which distributes BlackRock's BUIDL), OSL Securities in Hong Kong, ADDX in Singapore or Archax in the UK. Such distributors either distribute fund tokens that have been directly issued by the fund, or tokens that are collateralized by fund shares.

With this distribution route, the fund managers expand their potential distribution base to the client base of the digital distributor and is not limited anymore to its own client base. Investors using these distributors have access to a larger product base that can be diversified or more focused on a specific type of assets. As of today, these platforms tend to offer only the funds they have tokenized themselves, creating a narrow market scope that can restrict growth and wider adoption of tokenized funds.

In that regard, **Securitize** distributes both a money market fund from BlackRock and private market products from Hamilton Lane. The US company started off as a pure technology company providing tokenization services, then expanded into services with the provision of digital transfer agency services and eventually became a registered broker dealer distributing products tokenized on its own platform. It is partly

[17] Increasingly, countries are introducing crypto-specific regulations that do not fit neatly into traditional categories. Examples include licensing regimes for crypto exchanges, wallet providers, and other crypto service providers. The EU's Markets in Crypto-Assets Regulation (MiCA) is a notable example of a comprehensive regulatory framework specifically for crypto-assets.

owned by BlackRock following a strategic €47m investment carried out in 2024. Securitize does not offer any cryptocurrency trading services.

This is the case of direct distribution platform such as **Archax** in the UK and **OSL Securities** in Hong Kong. On both accounts, these distributors enable their user to trade both cryptocurrencies and invest in tokenized funds, generally presented as Real World Assets ("RWA"). These companies, which are registered broker dealers in their respective jurisdiction, **provides a bridge from the cryptocurrency world to the tokenized RWA world.**[18]

A good example of a more specialized distributor providing tokenization services is **ADDX**, a digital, blockchain-based distributor based in Singapore. They focus on the tokenization of private market funds that are made available for subscription at smaller ticket size directly on its platform as part of the democratization of private market game.

7.2.1 Crypto Exchange Route

For asset managers, at least in the short term, the real distribution business boost from the onchain world may come from getting access to cryptocurrency exchange, which now generally benefit from a clearer and more straightforward regulatory framework in Europe (MiCA), as well as in various Asian jurisdictions (Singapore: Payment Service Act "PSA"; Hong Kong: Licensing Regime for Virtual Asset Trading Platforms; Malaysia: Digital Assets Framework).

If and when fund assets have been tokenized, and to the extent those cryptocurrency exchange platforms obtain the necessary licenses for distributing financial securities that have been tokenized and that are subject to security regulations, it is likely to be a short step for these platforms to begin offering their clients investment solutions in the form of tokenized funds. The business opportunity could be important when compared to the trading volume of these crypto exchanges.

For now, the development of tokenized fund distribution on centralized crypto exchange is limited in large part by the impediments to the development of a secondary market for tokenized fund assets and the need for such exchange to obtain the right license as investment firm allowed to distribute financial securities.

As of today, there is no real secondary market for tokenized fund assets, even on the platforms that facilitate such trading, such as Securitize Markets, ADDX, and SDX in Switzerland. **This limitation is primarily due to the small size of the market and the requirement to systematically whitelist the wallets that can receive these assets.** Consequently, liquidity is typically low, and trading is restricted to whitelisted participants on the same platform, with no access to public decentralized exchanges for regulatory reasons. Investors are unable to freely sell tokenized shares to another client unless it is done through an authorized or approved venue.

[18] Archax, which was directly engaged during our research work, reported that it considered now the tokenization business as a secondary business and that it was rather focused on the distribution of tokenised funds.

Figure 22 Trading Volumes of Leading Cryptocurrency Distribution Platforms		
Exchange	Approximate Trading Volume (USD)	Comment
Binance	$2.2 trillion (Q1 2025)	Leading exchange with over 40% global spot market share.
Coinbase	$312 billion (quarterly)	Strong user base with 8 million monthly transacting users.
Kraken	Not explicitly stated, but growing	Reported 29% YoY trading volume growth in Q1 2025.
Bitfinex	~$220 million (24h volume)	24-hour trading volume around $220 million.
Huobi	~$2.2 billion (daily)	Average daily spot and derivatives volume combined.
OKX	~$1.65 billion (24h volume)	Second-largest exchange by daily volume, with diverse trading options.
KuCoin	~$875 million (24h volume)	24-hour trading volume close to $875 million.
Bitstamp	~$7.6 billion (monthly)	Monthly trading volume around $7.6 billion, focused on institutional liquidity.

Source: Company websites

7.3 The On-Chain Off-Chain Convergence

Structurally, and over the longer run, beyond the initial growth of tokenized funds that will likely be driven by digital-native investors, we can expect traditional distributors to increasingly incorporate tokenized funds into their offering, as the convergence between the on-chain and off-chain world occurs.

In some ways, such convergence has already started to emerge – at least on the asset side of the investment management business. In 2022, BlackRock collaborated with Coinbase to incorporate Coinbase Prime features into Aladdin, BlackRock's proprietary investment management platform. This integration enabled BlackRock and its clients in North America to effortlessly manage bitcoin and ether exposures alongside traditional assets and is used as part of the management of BlackRock's bitcoin ETF, the iShares Bitcoin Trust.

In the end, such **Integrated Global Distribution Approach** would integrate traditional distribution networks—banks, asset managers, and distributors—with on-chain distribution capabilities, creating a unified framework with the possibility to move around tokens across a blockchain type. This model suggests a shift from fragmented solutions toward a more standardized, scalable, and interoperable distribution ecosystem for tokenized assets.

Asset managers that have prepared this digital offering will have readily access to this market, which we believe will keep growing as an increasing supply of tokenized instruments encourages even more investors to move their investments and savings onchain.

Eventually, legacy offchain asset managers not developing this offering may be at risk not only of losing out to more agile and foreseeing legacy managers, but also of losing market share to "Web 3.0" asset managers that are more agile at using the blockchain technology and naturally connected to the digital investor community, where the initial tokenized fund market growth may come from.

Such a migration process will be gradual, with an acceleration likely to happen when traditional distributors—including banks, fund platforms and brokers—start incorporating digital assets directly into their offering and enable their clients to transact seamlessly using their digital wallet. **The distribution of tokenized funds will then go beyond the limited channels of direct distribution by the fund manager itself or the distribution of specialized intermediaries with a limited market reach.**

7.4 Investor Types: Institutional and Retail Investors

The current investor base for tokenized fund assets is currently biased towards *professional* investors given the private (i.e. exempt from registration) nature of some dominant US tokenized funds, as well as the relatively limited distribution outlets for tokenized funds.

Only a handful of large-scale tokenized funds are directly available to retail investors today, including in the US the Franklin Onchain U.S. Government Money Fund (BENJI) and the WisdomTree Government Money Market Digital Fund (WTGXX). In Europe, the best-known examples of directly distributed fund are Spiko's Euro and USD money market funds. Such funds are a good example of the **Direct Distribution (D2C)** Model available to promoters of tokenized funds. Under this model, fund shares are available for subscription directly from the investment manager's website or app after creating an investor account and linking it to a digital wallet.

We canvassed the market to find cases of real money institutions having invested in tokenized fund assets and found very little examples of publicly disclosed cases of actual investments, whereas the interest for the distribution techniques is rather high. Whereas this may seem contradictory, it is consistent with the unrealized potential use cases for tokenization, notably with respect to the use of money market fund tokens as part of collateralized lending operations.

Important examples of tokenized funds being used by professional or corporate investors at this stage include the case of French company Spiko as well as US Defi Platform Ondo Finance. On both accounts, the relative success of these companies suggests that flows into tokenized funds are likely to come in the first place from digitally native or agile investors. Both Spiko and Ondo can be seen as Web 3.0 asset managers with direct access to a digitally native institutional investor base.

The investor base of Spiko, a Web 3.0 asset management company that proposes a EUR and USD money market fund, is essentially composed of relatively young, small balance sheet companies with digitally agile management team but relatively tight access to money market fund offering for cash management purposes. We note as well that public development bank Bpifrance recently announced a subscription to the Spiko Euro money market fund.

Ondo Finance's Delaware-domiciled, OUSG private fund for accredited investors invests most of its reserve in tokenized money market funds, acting as an institutional investor for various asset managers that have already launched natively tokenized funds in the US. As explained by Ondo, it launched the OUSG token in January 2023, providing onchain exposure to US Treasuries. Initial liquidity was limited and costly due to the need for large stablecoin reserves to support 24/7 trading.

Ondo says that this changed when an opportunity for improved liquidity appeared as BlackRock and Securitize partnered with Circle to introduce the BUIDL token. Circle committed $100 million in USDC to enable instant BUIDL token purchases, offering deep, continuous liquidity without typical opportunity costs. This created a more efficient link between stablecoins and real-world assets.

Following this, Ondo migrated most OUSG reserves into BUIDL, enabling instant, 24/7 redemptions in stablecoins. Ondo also added features such as instant minting and redemption via USDC, lower minimum investments (starting at $100,000, then $5,000), and daily interest distributions. Besides, Ondo now offers two interest models: increasing redemption value (OUSG) and automatic token balance growth (rOUSG), differing from BUIDL's monthly interest payout. Currently, the majority of OUSG's reserve assets, totaling $710 million, are invested in funds that have been natively tokenized or are set to be tokenized, including:

- BlackRock USD Institutional Digital Liquidity Fund (BUIDL),
- Franklin Templeton Franklin OnChain U.S. Government Money Fund (FOBXX)
- WisdomTree Government Money Market Digital Fund (WTGXX)
- FundBridge Capital's Delta Wellington Ultra Short Treasury On-Chain Fund (ULTRA)
- Fidelity Treasury Digital Fund (FYHXX)

7.4.1 Institutions: More Curiosity than Real Flows

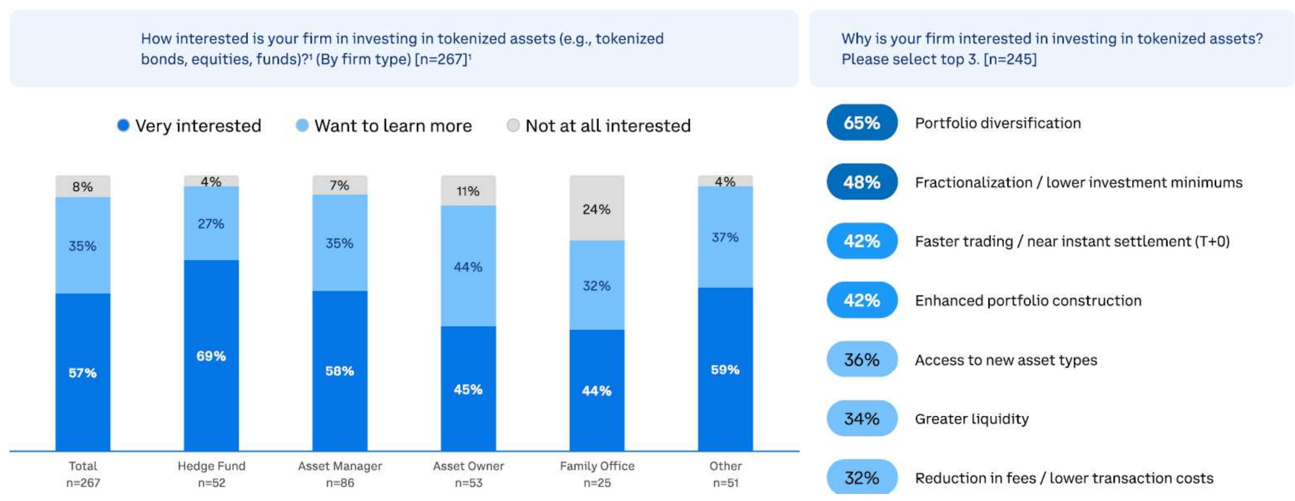
Overall, the limited examples we could find of institutional investments into tokenized funds, essentially from corporate asset owners or third-party asset managers, contrasts with the rather upbeat perspective from recent institutional investor survey.

A recent survey conducted by EY-Parthenon, with more than 250 professional investors, reports that more than half are very interested in investing in tokenized assets. Hedge funds show the highest interest, with 69% being very interested, followed by asset managers, with 58% very interested, and asset owners and family offices with respectively 45% and 44% being very interested.

The report stated that among those interested, 47% would like to invest in tokenized alternative funds, 44% in tokenized commodities, 42% in tokenized equities, and 38% in tokenized public funds, including mutual funds, ETPs, UCITs. The time horizon over which they seek to realize these investments is quite short, as 61% want to begin investing in tokenized assets in 2025 or 2026.

Yet, the term "interest" may be more indicative of curiosity, at least in the short term, and should probably be not taken at face value, especially from real money investors. **Another recent survey by The Value Exchange found that only 4% of pension funds were planning to use DLT and digital assets for live, daily operations in 2026.** Already in 2022, according to an often-quoted BNY Mellon survey of 300 large asset owners and hedge funds worldwide, 91% of the surveyed investors declared they were interested in investing in some type of tokenized asset within the following few years, and 97% said that tokenization would revolutionize asset management and would be good for the industry. The relatively slow market take-off suggests that investors are probably still waiting for the actual tokenized fund use case to become a reality.

Figure 23 Institutional survey results regarding the interest in investing in tokenized assets



Source: EY Partheon; Coinbase

8 Competition: After the Neobanks, the Neomanagers?

In this section

The current competitive landscape is nuanced. Once we weed out the various sandbox announcements and private blockchain tokenized funds that trade in closed fund platform environment that have accounted for much of the chatter in the market, the tokenized fund market growth may be impressive ($1 billion in March 2024 to $10 billion in June 2025, and a 25% annual growth rate since 2022), but small at $10 billion, and essentially concentrated in money market funds managed by a handful of managers feeding each other.

The tokenization operational models observed in the market, ranked from the least to most tokenization intensive, include: **1) Delegation Model,** i.e. portfolio management on behalf of a web 3.0 manager, or "neomanager" with limited proprietary asset management capabilities; **2) Asset-Backed Model:** Tokens that are backed by a portfolio of fund shares are issued by a financial service company, sometimes presented as "vaults", "yield coins", etc. **3) Hybrid Model:** Fund shares are issued in parallel offchain and onchain directly from a single fund, using separate onchain registrar and transfer agents. **4) Native Model:** Fund shares are exclusively issued, registered, and traded via the DLT, and the fund has been designed consequently.

Approximately 75 fully native onchain funds dominate the market, with BlackRock, Franklin Templeton, Ondo Finance, and Superstate leading in the US, Spiko in Europe, and China AMC in Asia. BlackRock's BUIDL fund alone accounts for 35% of the market, with seven funds controlling 80% of total value, largely fueled by inflows from stablecoin reserves and offshore tokenized funds issued by DeFi managers like OpenEden and OpenTrade. Traditional asset managers are also investing in blockchain infrastructure, as seen in BlackRock's $47 million investment in Securitize and Goldman Sachs' $135 million funding of Digital Asset to advance tokenization networks.

Despite the potential for broader applications, over 90% of tokenized assets remain in money market funds due to their low-risk profiles and regulatory comfort, with demand driven by onchain investors seeking cash-like instruments. Private market tokenization, remains limited, with early efforts by Securitize and platforms like ADDX and Invesco focusing on pilot projects. In particular, Hamilton Lane has been a leader in this space, launching multiple tokenized funds since 2022, reducing investment minimums, and expanding access through partnerships in the U.S. and Europe.

ETFs have seen no real direct tokenization activity, with most initiatives involving tokens backed by ETFs rather than directly issued on distributed ledgers, and adoption remains low. There has been a bout of announcements in that regard lately, notably from Robinhood which entered the tokenization space by launching 200 tokens linked to US-listed ETFs and stocks

Recent market surveys indicate growing but cautious interest among asset managers, with 29% using DLT in live operations in 2025, up from 11% in 2024, and a 48% increase in staff engagement year-over-year. Tokenization is gradually gaining strategic importance, and some firms are appointing dedicated leaders to oversee tokenization projects, ensuring alignment across commercial, investment, operational, and legal teams.

8.1 Tokenization Operational Models

When approaching fund tokenization as a business opportunity, various operational models, each with various degrees of technological and commercial involvement, can be considered. These models, ranked from the least to most tokenization intensive, include:

1. **Delegation Model:** Portfolio management on behalf of a fund managed by a Web 3.0 fund management company (Spiko) or of an onchain asset issued by a DeFi players (BlackRock & Circle). The investment manager is not directly involved in fund tokenization but manages the asset portfolio from a fund that has been tokenized by a third-party fund manager (Spiko), or the collateral reserve of an onchain financial instrument (Circle). More of a business opportunity linked to DeFi or onchain finance than about fund tokenization.
2. **Asset-Backed Model:** Tokens are issued by a financial service company (e.g. Archax) that is not the fund itself and that represents the property of fund shares that are registered to a nominee account in an offchain register.
3. **Hybrid Model:** Fund shares are issued in parallel offchain and onchain directly from a single fund, using separate onchain registrar and transfer agents (e.g. IZNES, FundsDLT, CACEIS, Standard Chartered, Allfunds, etc).
4. **Native Model:** Fund shares are exclusively issued, registered, and traded via the DLT, and the fund has been designed consequently. In some cases, settlement can be performed using digital currencies. There will still be some of the operations carried out offchain, including sometimes the maintenance of an offchain register as well as the final trade settlement in fiat currencies using a conversion provider.

8.2 The Old and the New: DeFi Feeding Tradfi

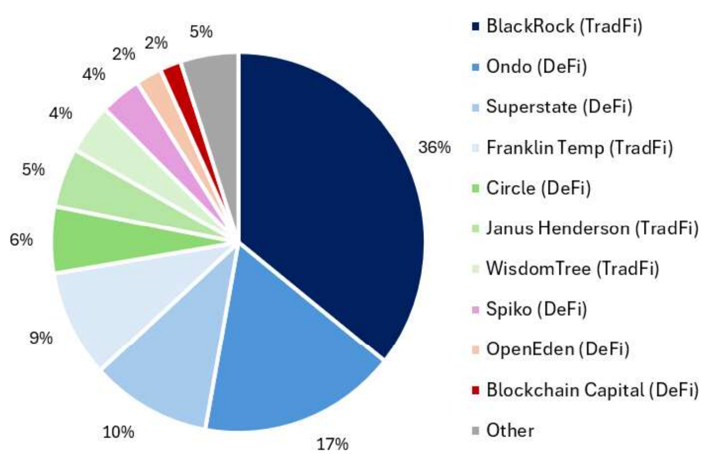
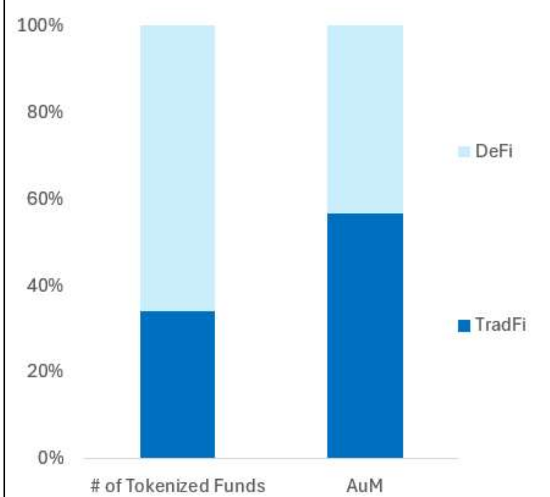
According to the fund mapping performed by data vendor RWA, there are currently approximately **75, fully native onchain funds**, which we define as funds that were designed primarily to issue shares in a tokenized format and enable the dealing of these shares via a distributed ledger. BlackRock, Franklin Templeton, Ondo Finance and Superstate accounting for nearly all of the US money market, and Spiko for the Euro money market. China AMC has been one the most visible funds in Asia with its HKD Digital Money Market Fund.

The market's growth is largely driven by a handful of industry giants that have so far captured the majority of inflows. For instance, the BUIDL fund by BlackRock alone accounts for $2.9 billion, representing a significant 35% of the total tokenized fund market. Other major players include the Franklin Templeton FOBXX fund and the Ondo OUSG fund, each holding 9% of the market share. Together, the seven largest tokenized funds dominate the landscape, concentrating 80% of the total market value. This high level of concentration suggests that while the market is expanding, it is primarily shaped by a few well-established names with significant resources and brand recognition, and that get most of their inflows from issuers of other money market tokens that are directly plugged into the onchain ecosystem.

As a matter of fact, most of the AUM of the two largest tokenized money market funds from traditional investment managers appear to come from the reserve of stable coins or other tokenized money market funds issued in tokenized format domiciled offshore (generally in the British Virgins Island or Bermuda, with money market fund tokens issued by Web 3.0, DeFi managers such as OpenEden's USDO, Ondo Finance's OUSG, OpenTrade's suite of money market Funds vaults, including XTBT (USD) and XEVT (EUR).

While not involving directly tokenization operations for an asset manager, it is important to note that the emergence of new Defi players in the financial industry represents as well a traditonal investment management opportunity. Such opportunity is illustrated by BlackRock's management of Circle's USDC stablecoin reserves, which is composed essentially of T-Bills.

Figure 24 Breakdown of Asset Managers (% of Total Tokenized Fund Assets)

Top 10 Asset Managers & Other	Per Asset Manager Type TradFI VS DeFI
	

Source: rwa.xyz (tokenized fund database

8.2.1 TradFi Buying into DeFi

Traditional asset managers are increasingly investing directly in tokenization service providers, reflecting their growing interest in blockchain-enabled financial infrastructure. In May 2024, BlackRock led a $47 million funding round in Securitize, a platform specializing in tokenizing real-world assets, alongside Hamilton Lane, ParaFi, and Tradeweb. This coincided with the launch of BlackRock's first tokenized fund, BUIDL, on Ethereum, with Securitize serving as its transfer agent. Earlier, in June 2021, Morgan Stanley co-led a $48 million Series B funding round in Securitize, alongside Blockchain Capital, IDC Ventures, and others. This investment marked Morgan Stanley's first foray into blockchain.

Generali has also backed IZNES, a platform focused on tokenized fund distribution and settlement, though the exact date of this investment remains unspecified. In September 2024, Janus Henderson took over management of Anemoy's onchain treasury fund, which issues digital tokens for U.S. Treasuries with near-instant settlement. Additionally, in August 2022, Aberdeen became the largest external shareholder in Archax, the UK's first regulated digital securities exchange.

The latest example, revealed in June 2025, involves Goldman Sachs, BNP Paribas, and Citadel Securities investing $135 million in Digital Asset, a blockchain firm advancing the Canton Network. This network is designed for financial institutions to tokenize real-world assets such as bonds, commodities, and money market funds. The investment underscores the growing institutional adoption of blockchain technology to tokenize and manage assets at scale.

8.3 Money Market Ubiquity

Despite all the talks about the improved private market access tokenization could bring to smaller ticket investors, assuming more operational efficiencies in heavily manual administrative tasks associated with these assets, and the eventual creation of secondary markets once pending KYC questions are worked out, the tokenized fund market remains a money market one today. The majority of mutual funds that have been tokenized so far are money market funds—or at least, short-duration, low-volatility funds such as tokenized treasuries and cash-equivalent instruments.

Over 90% of the assets are managed as part of money market funds, the remainder being under management in private assets and fixed income. Investors can choose from funds managed by established incumbents, such as BlackRock, WisdomTree, and Franklin Templeton, as well as Web3 natives such as Ondo Finance, Superstate, and Maple Finance. Tokenized money market funds will likely see sustained demand in a higher-interest-rate environment.

Overview of the Tokenized Fund Market by Asset Class

Figure 25 Breakdown of Tokenized Fund AuM by Asset Class (in M$)

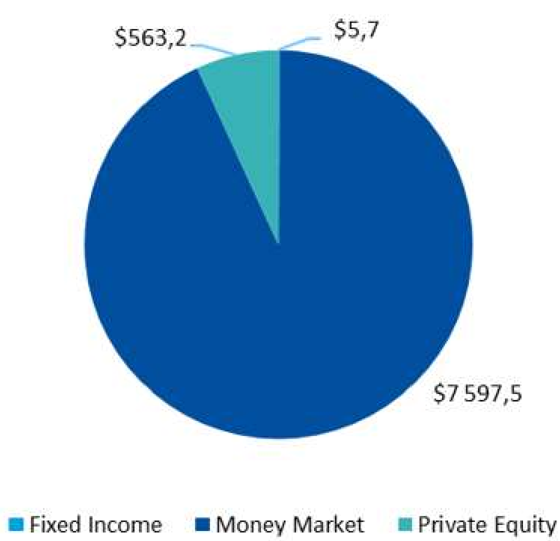


Figure 26 Number of Tokenized Funds by Asset Class (Public BC)

Money Market	53
Private Equity	17
Fixed Income	6

Source: rwa.xyz

This momentum for money market funds can be explained by two main factors. **The first one is the immediate business opportunity.** Onchain ecosystem investors, including digital native individual investors, but also token issuers, have a need for onchain cash-like Instruments. A good example of such natural investor is Ondo Finance with its Ondo Short-Term US Government Bond Fund (OUSG Fund), which operates as a feeder fund, allocating the majority of its assets to high-quality tokenized funds such as BlackRock's USD Institutional Digital Liquidity Fund (BUIDL), WisdomTree Government Money Market Digital Fund (WTGXX), Fidelity Treasury Digital Fund (FYHXX), and Franklin OnChain U.S. Government Money Fund (BENJI). This diversified portfolio is further complemented by holdings in USDC, cash, and bank deposits, ensuring liquidity and stability.

Second, money market funds are a natural testing ground due to their conservative risk profiles. Regulators are generally more comfortable approving tokenization pilots involving low-risk funds. Money market funds invest in short-term, low-risk instruments, making them relatively easy to manage in a tokenized format without facing complex liquidity, pricing, or volatility issues. These funds usually maintain a stable net asset value (NAV), which aligns well with the programmability of tokens and simplifies settlement logic in smart contracts.

Figure 27 Tokenized US Treasuries by Product

Source: rwa.xyz (tokenized fund database

Figure 28 Money Market Tokenized funds – Top 20 largest funds	
Product Name	AuM June 2025*
BlackRock USD Institutional Digital Liquidity Fund	$2 909m
Franklin OnChain U.S. Government Money Fund	$743m
Ondo Short-Term US Government Bond Fund	$710m
Superstate Short Duration US Government Securities Fund	$691m
Ondo U.S. Dollar Yield	$683m
Circle USYC	$462m
Janus Henderson Anemoy Treasury Fund	$409m

WisdomTree Government Money Market Digital Fund	$315m
Spiko EU T-Bills Money Market FundSpiko	$200m
OpenEden TBILL Vault	$185m
Superstate Crypto Carry FundSuperstate	$156m
Spiko US T-Bills Money Market Fund	$89m
abrdn Liquidity Fund (Lux) – US Dollar Fund	$45m
Fidelity ILF USD Fund Class G Acc	$42m
OpenTrade Flexible Term USD Vault	$31m
WisdomTree Floating Rate Treasury Fund - Dinari	$26m
Libre SAF VCC - USD I Money Market	$22m
Backed ERNX € Ultrashort BondBacked Finance	$11m
abrdn Liquidity Fund (Lux) - Euro FundArchax	$11m
Backed GOVIES 0-6 Months Euro Investment GradeBacked Finance	$9m
Source: rwa.xyz (tokenized fund database)	

8.4 Private Markets: A Timid Beginning

At the other end of tokenization spectrum are private market, which could yield powerful operational and commercial use cases as tokenized private fund shares could be offered in smaller size with even more liquidity *if a secondary market eventually develops*. Yet, the development of this market has so far been limited, probably for the exact opposite reason that has given money market funds a headstart in the tokenization market. Where regulators are generally comfortable in approving new approaches to dealing in funds with a conservative investment profile, they may be more reluctant in approving a new approach designed to enlarge access to sophisticated, less liquid assets to a potentially new investor base.

The largest private markets funds so far have all been tokenized by Securitize, a tokenization specialist providing transfer agency and distribution services.

Figure 29 Private Market Tokenized funds – Top 10 largest funds

Product Name	AuM June 2025*
Blockchain Capital III Digital Liquid Venture Fund Securitize	$148m
Apollo Diversified Credit Securitize Fund Securitize	$71m
SPiCE VCSecuritize	$38m
Cosimo XSecuritize	$22m
Republic NOTERepublic	$16m

Re Member Fund LPSecuritize	$13m
Science BlockchainSecuritize	$12m
Hamilton Lane Senior Credit Opportunities Securitize Fund	$9m
Libre SAF VCC - BH Master Fund AccessLibre Capital	$7m
Libre SAF VCC - Hamilton Lane SCOPE Private Credit AccessLibre Capital	$7m

Source: Amundi BI — ** Total AuM of the fund in the case of hybrid tokenized funds*

Beyond this list, at the crossroad of private and public markets, we note that the **Invesco US Senior Loan Strategy (iSNR)** stands out as the main private markets fund available so far in Asia, specifically in Singapore via distributor DigiFT. It is a tokenized fund that provides exposure to Invesco's senior loan assets, aiming to deliver high current income while preserving capital by investing in floating-rate, senior secured debt of large companies.

While the private markets segment with tokenized funds is still in its early stages in Asia, efforts by platforms like ADDX have begun to tokenize shares of private equity funds, lowering investment minimums and expanding access for accredited investors. However, these initiatives remain limited and mostly in pilot or past offering phases, indicating that the market for tokenized private assets in the region is just beginning to develop.

8.4.1 Focus on Hamilton Lane

The tokenized private market use cases, in particular for the commercial aspect, remain theoretical and only a handful of private funds have been tokenized so far. Hamilton Lane, a major US-based private asset manager has been the most active in that regard, with four identified tokenized funds so far.

Figure 30 Tokenized Funds Launched by Hamilton Lane with Securitize and Sygnum

Fund Name	Asset Class	Fund Size	Launch Date	Platform	Minimum Investment	Key Features
Equity Opportunities Fund V	Private Equity	$5,521,250	Jan 2023	Securitize	$20,000	Access to flagship direct equity investments with reduced entry barriers.
Senior Credit Opportunities Fund (SCOPE)	Private Credit	$8,790,916	May 2023	Securitize	$10,000	Evergreen fund with on-demand redemptions and digitized processes.
Secondary Fund VI	Private Equity	$6,430,000	Aug 2024	Securitize	$20,000	Exposure to secondary market investments with streamlined digital access.
Global Private Assets (GPA) Fund	Multi-Strategy	-	Feb 2024	Sygnum/Apex	-	DLT-registered shares enhancing accessibility and operational efficiency.

Source: Amundi BI / Hamilton Lane Website

Starting in 2022, Hamilton Lane partnered with Securitize to tokenize three of its funds, aiming to reduce investment minimums and streamline the investment process. **All of the tokenized funds are feeder funds, aiming to ease the access to private investment products for qualified U.S.-based investors**. All these funds are tokenized on the Polygon blockchain, enhancing liquidity and accessibility:

- **Equity Opportunities Fund V:** Launched in January 2023, this flagship direct equity fund was made accessible to individual investors with a reduced minimum investment of $20,000, down from the traditional $5 million.
- **Senior Credit Opportunities Fund (SCOPE):** Introduced in May 2023, this evergreen private credit fund offers on-demand redemptions and a fully digitized subscription process, with minimum investments starting at $10,000.
- **Secondary Fund VI:** In August 2024, a tokenized feeder fund for this $5.6 billion secondary fund was launched, lowering the minimum investment to $20,000.

It is worth noting that as part of an effort to incorporate tokenization technology into its own tech stack, Hamilton Lane participated in a $47 million funding round for Securitize, alongside BlackRock, ParaFi Capital, and Tradeweb Markets in May 2024. This investment highlights Hamilton Lane's ongoing commitment to digital asset securities and the expansion of private market access through tokenization. The funding is designed to support Securitize's efforts to innovate and expand within the digital asset ecosystem, leveraging blockchain technology to enhance transparency and efficiency in capital markets. This strategic move aligns with Hamilton Lane's broader objective of democratizing access to private markets, building on its history of collaboration with Securitize, which began in 2022.

Still on the US market, Hamilton Lane has as well partnered with **Republic**[19] to offer retail investors access to private market funds, targeting a $13 trillion global market. This collaboration aims to launch blockchain-based solutions with low investment minimums and increased liquidity. The first offering is expected in the first half of 2025. Hamilton Lane, managing over $947 billion in assets, highlights that private markets have outperformed public markets in 19 of the last 20 years. The partnership introduces Hamilton Lane's Private Infrastructure Fund (HLPIF) on Republic's platform, allowing non-accredited investors to participate with a minimum investment of $500. This initiative marks a significant step in democratizing access to institutional-grade private market investments, leveraging tokenization to enhance accessibility and liquidity.

More recently, it has partnered with Sygnum Bank & Apex Group as well as with Allfunds Blockchain for the tokenization of its funds to be distributed on the European market. In February 2024, Hamilton Lane, Sygnum Bank, and Apex Group launched a DLT-registered share class for the Luxembourg-based Hamilton Lane Global Private Assets (GPA) Fund. This initiative uses blockchain technology to automate fund management, reducing entry barriers for investors while retaining traditional share benefits. The fund, valued at $3.8 billion, will issue shares natively on the Polygon blockchain, contrasting with typical tokenization of existing shares. Apex Group acts as the global fund administrator and transfer agent. The use of DLT

19 Republic is a global investment platform that specializes in private market assets, offering innovative digital solutions to democratize access to various investment opportunities for retail investors.

aims to lower minimum investment requirements, enhancing accessibility. Sygnum's DLT solution handles registration, with FundRock-LRI managing the onchain registry.

In December 2024, Hamilton Lane announced a partnership with **Allfunds Blockchain** to tokenize certain funds for European professional investors. This collaboration aims to improve operational efficiency and reduce costs in international fund distribution. The initiative leverages the Allfunds Blockchain platform to offer tokenized versions of Hamilton Lane funds, with Apex Group acting as the transfer agent. The partnership targets expanding private market solutions across key European markets, including Spain and Italy.

8.5 ETFs: Waiting in the Wings

Overall, the use cases for tokenization that apply to unlisted funds could generally apply to ETFs, but probably with a lesser impact given that ETFs, by definition, already benefit from a secondary market, which could be one of the most important benefits from tokenization at target. The use of DLT technology could as well bring reductions in the operational cost of the brokers providing fractionalization services by optimizing and automating the operations necessary to keep track of the fractionalized ETF shares as part of their internal ledger, in particular when dealing with retail investors and the massive volume of operations it can entail. This could be of particular interest with the development of model portfolios including ETFs.

We referenced almost no examples of ETFs that had been tokenized during our research project. The closest examples of ETFs issued in tokenized format are the Bosera USD Money Market ETF and the Bosera HKD Money Market ETF, but a closer look reveals that on both accounts, these two fund issue both listed (ETFs) and unlisted share classes and that the tokenized share classes are actually unlisted ones. We did not find any instances of ETFs directly issued on a distributed ledger by the fund issuer.

What we did find though are **examples of tokens issued and backed by ETFs** by licensed token issuer, under the EU digital asset regulatory framework or the Swiss one. This includes the tokens issued by Backed Finance, a financial service provider operating under the Swiss DLT Act, as well as tokens issued by Swarm, a BaFIN-regulated DeFi platform licensed under the German Banking Act.

These two companies issue tokens that are backed by ETFs and that provides a 1:1 exposure to the underlying ETFs. All of the issued tokens are backed by **iShares ETFs**. The ETF-backed tokens issued by these two DeFi companies seem to have gained little traction so far, with a disclosed assets of about €40k for the two ETF-backed tokens by Swarm and amounts that could not be definitely verified for the tokens issued by Backed, but which seemed to be thinly traded as of the end of June 2025. Other identified issuers of tokenized certificates (i.e. “yield vaults”) backed by ETF include OpenTrade’s High Yield Corporate Bond Vault, a flexible term, variable rate on-chain loans fully secured by high yield corporate bond ETFs

Strategies implemented through ETFs can now be replicated and enhanced for onchain use, as demonstrated by the launch of Janus Henderson's JAAA fund, which has been made available previously as an actively managed ETF. Unlike tokenized ETF wrappers or share classes, the JAAA represents a fully blockchain-native product, designed from the ground up to operate within the decentralized finance (DeFi) ecosystem. This fund integrates the AAA CLO strategy of Janus Henderson, previously available only to institutional investors, into a tokenized format that offers transparency, daily liquidity, and reduced operational costs. By leveraging distributed ledger technology (DLT), the JAAA eliminates intermediaries, optimizes efficiency, and expands access to a broader investor base. This example highlights how tokenization can go beyond merely replicating traditional ETF structures, enabling the creation of innovative, institutional-grade investment products that bridge the gap between traditional finance (TradFi) and DeFi.

Robinhood has also entered the tokenization space by launching 200 tokens linked to US-listed ETFs and stocks, enabling European investors to trade these assets 24/5 on the Arbitrum blockchain. Notably, these tokens are not directly issued by the financial instrument's issuer but are instead collateralized by ETFs purchased by Robinhood itself. This mirrors the approach of other brokers, where tokens represent fractional ownership of ETFs rather than being native blockchain assets.

Robinhood plans to expand this offering by developing its own Layer 2 blockchain, which will support 24/7 trading and self-custody. While this initiative provides greater accessibility and operational efficiency, it remains complementary to traditional ETFs rather than replacing them. The Vanguard S&P 500 ETF (VOO) is among the flagship ETFs included in this rollout, alongside popular stocks like Nvidia, Apple, and Microsoft. This development underscores the growing interest in tokenization as a mean to modernize financial markets, though its transformative potential for ETFs remains to be fully realized.

8.6 Asset Manager Initiatives: Mixed and Growing Sentiment

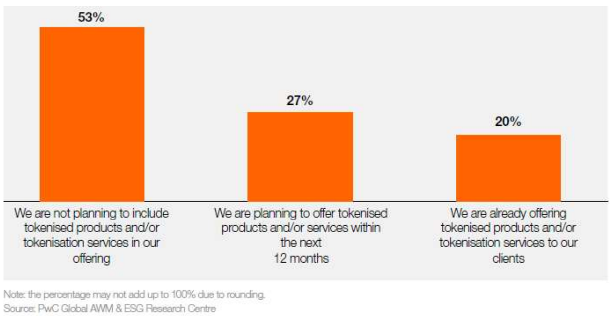
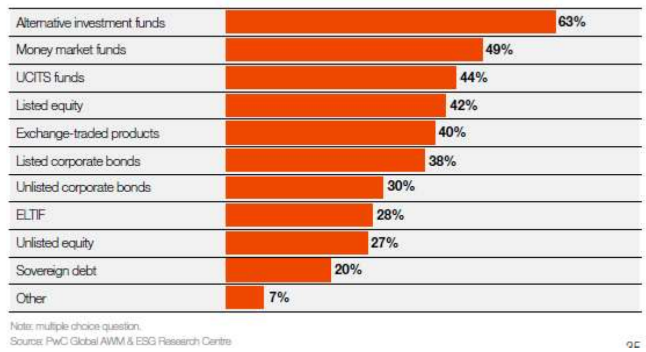
We gauged the developing interest for fund tokenization from the asset management community based on surveys that have recently queried asset managers about intentions and resources allocated fund tokenization, as well as on our own review of asset manager communication with respect to tokenization. **We found that the asset management community's sentiment about asset tokenization was improving, but not representative of a full adoption –** with roughly half of our sample of large-scale asset manager actively communicating on the topic.

Our own communication review findings are not unlike a recent survey carried out by PwC's survey on crypto assets among industry professionals in 2025 which revealed that half of respondents indicating that they are not planning to incorporate tokenized products or services in their offerings. In contrast, 20% have already integrated them, while 27% plan to do so within the next 12 months.

Most of PwC survey's respondents said that alternative investment funds were the most relevant assets to be tokenised, certainly with the democratization of private market play in mind, which for now remains more theory than reality, as illustrated by the small numbers of alternative, and in particular private funds that have been tokenized so far.

Amundi Business Intelligence
business.intelligence@amundi.com

Figure 31 PwC’s Survey on Tokenised Assets

What is Your Current Positioning on Tokenised Assets?	In Your Opinion, What Are The Most Relevant Assets to be Tokenised?
	

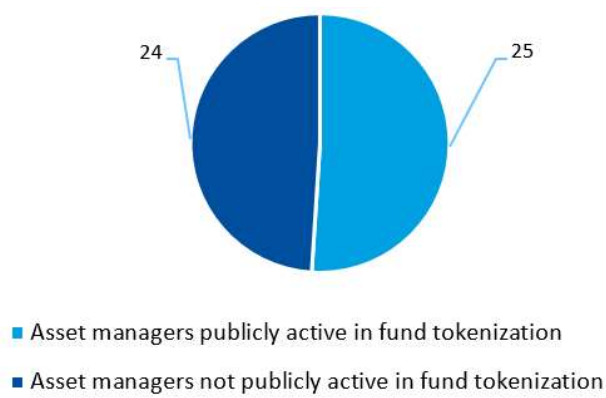
Source: Crypto-Assets Management Survey, PWC

Such observations are confirmed by our own review of the communication materials related to tokenization of the **50 largest asset managers worldwide**, which revealed that **approximately half of these asset managers worldwide publicly announce initiatives related to tokenization.**

Asset managers tend to be more communicative within the framework of collaborative initiatives, such as regulatory sandboxes like Project Guardian or Project Ensemble, which actively explore tokenization applications. Announcements related to this technology are generally tied to the launch of tokenized funds, pilot projects, or strategic partnerships, reflecting a measured and pragmatic approach to innovation. This strategy highlights their intent to adapt to technological advancements while mitigating the risks associated with premature adoption.

Figure 32 Asset managers fund tokenization activity (Top 50 Asset Managers worldwide)

We reviewed the annual reports and 10-K filings of each asset manager to assess their communication regarding tokenization. It turns out that very few players explicitly address this topic. Even among the most active asset managers in the field of tokenization, such as BlackRock and Franklin Templeton, the term is mentioned only once or twice, often in a peripheral context. This suggests that asset managers are adopting a cautious stance, refraining from making strong public commitments to this emerging technology.



Source: Company websites, annual reports & press releases, IPE

Another survey suggests that asset managers are increasing their resources allocated to fund tokenization. Since 2020, the annual ISSA “DLT in the Real World” industry survey has been tracking DLT and digital asset development in the asset management community and beyond, providing some historical depth with respect to these projects. This market survey was performed in Q2 2025 and queried 427 respondents globally. Over half of the respondents are asset managers falling in the "investor" category.

Whereas the first questions did not bear exclusively on fund tokenization, and covered as well investments into digital assets, **fund managers saying that they were planning to use DLT and digital assets for live operations stood at 29% in 2025, with intentions up by 6 percentage pointed to 35% for 2026.**

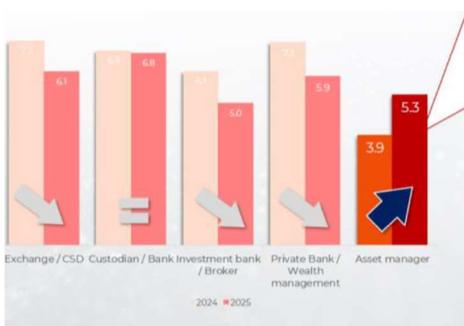
Figure 33 Planned Adoption of DLT and Digital Assets for Daily Operations by Segment (2025 vs 2026)

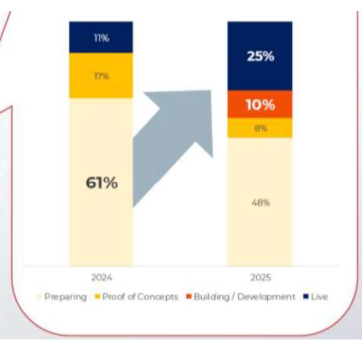
Source: *[DLT in the Real World 2025 (The Value Exchange)]*

More precisely, **asset managers declaring that digital assets and DLT were a strategic matter for them increased from 2024 to 2025.** Some of the projects started in the previous years as well apparently went into production, as 11% of the asset managers reported live digital assets or DLT projects in 2024 compared to 25% in 2025 as some proof of concepts projects passed into the production mode

Figure 34 Strategic Importance of DLT and Digital Assets (Average Score Out of 10 YoY)

Figure 35 % of Investors Working on DLT / Digital Assets (by stage)





Source: *[DLT in the Real World 2025 (The Value Exchange)]*

8.7 Asset Manager Organization: Tokenization Championing

Even if the actual use of DLT in in fund operations is far from being all-encompassing today, the topic does not appear to be limited to the IT department of investors and asset managers. According the ISSA study, there was a 48% increase in engagement from the C-Level and business heads on DLT and digital assets from 2024 to 2025 as the topic is slowly taking strategic value and has the potential to change the way the asset industry works, and possibly produces new asset management champions in the process. On the other hand, there seems to have been some fatigue from the compliance and IT department which slowed their engagement with respect to DLT and IT as some projects may have failed to materialize and drove them to redirect to projects with more short-term objectives.

Figure 36 % Change in Staff Engagement on DLT and Digital Assets in 2024/2025

Source: *DLT in the Real World 2025 (The Value Xchange)*

The idea that the tokenization of the asset management industry will be a slow, global process that will encompass most teams across regions within an asset managers may lead some companies to name a person in charge of tokenization project, whose function is to raise awareness amongst commercial, investment, operational and legal team used to work in the offchain world and to keep tab of all the projects in order to generate synergies and avoid overlapping projects within a company. Below is a list of around twenty Heads of Division within some of the world's leading asset managers and banking institutions, showcasing the growing emphasis on expertise and leadership in this domain.

Figure 37 Digital Asset Leadership at Leading AM and Banking Institutions

Asset Manager / Bank	Name	Role
BlackRock	Tony Ashraf	Managing Director - Digital Asset Transformation
Franklin Templeton	Robert Crossley	Global Head of Digital and Industry Advisory Services
Schroders	Marita McGinley	Head of Digital Asset Strategy
Hamilton Lane	Victor Jung	Managing Director - Head of Digital Assets
J.P. Morgan	Emma Lovett	Executive Director- Markets DLT – Credit Lead
Invesco	David Reed	Director - Emerging Technology Innovation
T. Rowe Price	Liz Lawson	Lead Digital Assets Analyst
Union Investment	Christoph Hock	Head of Tokenisation and Digital Assets
Fidelity Investments	Cynthia Lo Bessette	Head of Digital Asset Management
Natixis IM	Olivier Taille	Innovation Leader - Blockchain Officer
BNP Paribas AM	Stefan Brinaru	Head of Digital Assets

Morgan Stanley	Andrew Peel	Head of Digital Asset Markets
UBS Emerging Tech	Jakub Lesniowski	Lead Digital Assets Risk & Regulatory Management
BBVA AM & GW	Andres Fondevila Maron	Head of Digital Assets
BBVA Switzerland	Philippe Meyer	Head of Digital & Blockchain Solutions
Zürcher Kbank	Peter Hubli	Head of Digital Asset Solutions
DWS	Kim Beuttler	Digital Product & Solutions Manager
Deutsche Bank	Joy Adams	Chief Operating Officer - Digital Assets
Banco Santander	Luis Nacarino	Executive Director of Digital Assets
Arab Bank, Sitz.	Romain Braud	Director of Digital Assets Arab Bank
DZ Bank	Live Tschee-Wegert	Expert Digital Currencies
Wellington Mgt	Mark Garabedian	Director of Digital Assets and Tokenization Strategy
Source: Amundi BI		

9 Sources

Most of documents listed in this section are available on request from Amundi tokenization stakeholders. Please contact Julien Laplante, the research report project leader for more information.

In this section

9.1 Public Documents & Websites

Figure 38 Public Documents & Websites

Title	Source	Year
“La Tokénisation” : Memorandum de l’ADAN	ADAN	2025
7 Major Institutions That Have Embraced Tokenization	Landshare	2023
A Long-Awaited Revolution: Are the DLT Promises Ready to Turn into Reality	OMFIF	2025
A new age of digital wealth: Tokenisation and the transformation of investment	OMFIF	2025
Actifs numériques: Enjeux pour les directions financières, appréciation des risques et dispositifs de contrôles	KPMG	2023
Allfunds: 2024 Annual Report	Allfunds	2025
An Investment Perspective on Tokenization Part I: A Primer on the Use of Distributed Ledger Technology (DLT) to Tokenize Real-World and Financial Assets	CFA Institute	2025
An Investment Perspective on Tokenization—Part II: Policy and Regulatory Implications	CFA Institute	2025
APAC Distribution 360	Broadridge	2024
Apollo Diversified Credit Securitize Fund	Apollo / Securitize	2025
Approaching the Tokenization Tipping Point	BCG	2025
Asset Tokenization in Financial Markets: The Next Generation of Value Exchange	World Economic Forum	2024
Baillie Gifford Feeder Funds ICVC - Prospectus	Baillie Gifford	2025
BIS Papers No 147 Embracing diversity, advancing together –results of the 2023 BIS survey on central bank digital currencies and crypto	BIS	2025
BIS Papers No 147: Embracing diversity, advancing together – results of the 2023 BIS survey on central bank digital currencies and crypto	Bank for International Settlements	2024
Blockchain La révolution silencieuse	AGEFI	2024
BNP Paribas Asset Management launches tokenized money market fund shares for the first time using Allfunds Blockchain	BNPPAM	2025
BNP Paribas Funds - Prospectus	BNP Paribas	2025
BNP Paribas AM lancia azioni di fondi Money Market tokenizzate su Allfunds Blockchain	FundsPeople	2025
Bpifrance announces its subscription to Spiko’s tokenized money market fund, using its own cash reserves	Spiko	2025

Building the Digital Asset Securities Ecosystem	BCG	2024
Calastone Tokenised Distribution: Unlocking the future of fund distribution	Calastone	2024
CDP successfully issues its first Digital Bond on Blockchain. Intesa Sanpaolo fully underwrites the transaction	CDP	2024
Central Bank Digital Currency Tracker	Atlantic Council	2025
CFA institute Global Survey on Central Bank Digital Currency	CFA Institute	2023
Crypto-assets Management Survey: From exploration to integration	PWC	2025
Cryptoassets: Beyond the Hype	CFA Institute	2023
Decoding Digital Investment 2025	Amundi	2025
Decrypting the role of distributed ledger technology in payments processes	Bank of New Zealand	2018
Décryptonsle marchédes crypto-actifs	KPMG	2025
Delta Wellington Ultra Short Treasury On-Chain Fund	S&P	2025
Deutsche Bank completes trial of tokenized investment platform	Cointelegraph	2023
Digital dividends: How tokenized real estate could revolutionize asset management	Deloitte	2025
Distributed Ledger Technologies & Blockchain	CSSF	2020
DLR Transacts $1 Trillion a Month	Broadridge	2024
DLT Pilot Regime	ESMA	2025
Driving meaningful opportunity: tokenization in asset management	EY Parthenon	2023
ECB DLT trials: Key industry findings	The Value Exchange	2025
European Fund Distribution: Platforms	Platforum	2024
Franklin OnChain U.S. Government Money Fund - Luxembourg domicile	Franklin Templeton	2025
Franklin OnChain U.S. Government Money Fund - US domicile	Franklin Templeton	2025
From ripples to waves: The transformational power of tokenizing assets	Mckinsey	2024
Further Fund Tokenisation: Achieving Investment Fund 3.0 through Collaboration	IA UK	2024
Future of digital currency in India	PWC	2022
Gestion d'actifs : GENERALI et CARMIGNAC passent par IZNES pour automatiser et sécuriser leurs opérations via la Blockchain	IZNES	2024
Getting to Grips with Tokenisation	Calastone	2023
Global Layer One	MAS	2024
Groundbreaking Experimentation of DLT Settlement in Central Bank Money by IZNES with the European Central Bank and Banque de France	IZNES	2024
HKMA launches Project Ensemble Sandbox to accelerate adoption of tokenisation	HKMA	2025
Hong Kong Monetary Authority - HKSAR Government's Digital Green Bonds Offering	HKMA	2024
How Tokenization Can Fuel a $400 Billion Opportunity in Distributing Alternative Investments to Individuals	Bain	2024
IMMFA White Paper on Tokenisation of Money Market Funds	IMMFA	2024
Impacts de la blockchain dans les process métiers	AFG	2024
Increasing Allocations in a Maturing Market: 2025 Institutional Investor Digital Assets Survey	EY Parthenon	2025
Interim Report e-HKD Pilot Programme Phase 2	Visa	2025

Introducing the BlackRock BUIDL Fund	BlackRock / Securitize	2025
Introduction aux crypto-actifs, à la blockchain(DLT) et à la fi nance décentralisée (DeFi)	AFG	2024
Investing is More Accessible & Equitable with Tokenised Assets		2025
Italian Digital Funds: Guidelines	Assogestioni	2024
IZNES digitalise la distribution des fonds d'Edmond de Rothschild	IZNES	2024
Janus Henderson Anemoy Treasury Fund	Janus Henderson / Centrifuge	2025
JPMorgan Trade on Public Blockchain 'Monumental Step' for DeFi	JPMorgan	2022
Major client demand was the 'tipping point' for BNY Mellon's crypto services	Cointelegraph	2022
Migration to Digital Assets Accelerates	BNY	2022
Money Market and Tokenization: Collateral Opportunities	IA UK	2024
Navigating Asset Tokenization with Securitize | Interview with Carlos Domingo	Token Terminal	2024
Ofi Invest AM tests blockchain MNBC for unlisted funds and securities	Club Patrimoine	2025
Project EPIC: Fueling Tokenized Finance with On-Chain Enterprise Privacy, identify and composability	JPMorgan	2024
Project Guardian	MAS	2025
Prospectus - Statuts	Spiko	2025
Relevance of on-chain asset tokenization in 'crypto winter'	BCG	2022
Societe Generale issues a first digital green bond on a public blockchain - Société Générale	Societe Generale	2023
Stablcoins The Practicioners Guide (TAC)	TAC	2025
State of Tokenization 2024 Report	Tokenized Asset Coalition	2025
Strategy& Crypto Survey 2025	PWC	2025
Summary Prospectus: Franklin Onchain U.S. Government Money Fund	Franklin Templeton	2025
Superstate Short Duration US Government Securities Fund	Superstate	2025
The Asset Tokenization C-suite Playbook	KPMG	2024
The dark side of tokenisation	Financial Times	2024
The Financial Stability Implications of Tokenisation	FSB	2024
The Institutional Shift to Tokenized Funds: Market Growth and Future Outlook	InvestaX	2025
Tokenisation and Digital Custody in the World of the Investment Fund	ALFI	2020
Tokenisation de parts de fonds et gestion en actifs digitaux	AFG	2024
Tokenisation of Alternative Investments	BNP	2021
Tokenisation of assets and distributed ledger technologies in financial markets: Potential impediments to market development and policy implications	OECD	2024
Tokenisation, a buyside practitioner's guide	EFAMA	2025
Tokenisation: a $135bn opportunity for asset managers	Calastone (Funds Europe)	2025
Tokenisation: The new rails of finance	OMFIF	2025
Tokenised funds series Paper 1 - What, why and how	IA UK	2020
Tokenised funds series Paper 6 - Operational and cost differences	CMS	2023

Tokenization Trends in Business and Beyond: How global financial institutions and enterprises tokenize value	Ripple	2025
Tokenized Collateral Network:Tokenize, move and use assets as collateral	JPMorgan	2025
Tokenized Funds: The Third Revolution in Asset Management Decoded	BCG	2024
Tokenized Real-World Assets	Securitize	2025
UK Fund Tokenisation: A Blueprint for Implementation	IA UK	2023
Understanding the tokenisaiton of assets in financial markets	OECD	2021
White Paper	Assogestioni	2022
White paper: Decoding the Economics of Tokenisation: Transforming Cost Dynamics in Asset Management	Calastone	2025
Whitepaper: Tokenization of Funds: Mapping a way forward	SS&C	2023
Working Group Paper: Tokenisation of Investment Fund Shares Use cases Review and Analysis	ALFI	2025

9.2 Private External Documents

Figure 39 Private External Documents

Title	Source	Year
CACEIS Digital Assets	CACEIS	2025
CASA Digital Assets ROI Benchmark	CASA	2024
Digital Assets & Tokenisation	HSBC	2025
Introducing FundsDLT	Funds DLT	2024
Investir dans des parts de fonds n'a jamais été aussi simple !	IZNES	2025
J.P. Morgan Solutions for Amundi	JPMorgan	2024
Objectifs recherchés par les acteurs du marché	CASA	2024
Point de vue – Actifs numériques, un champ de bataille pour la souveraineté européenne	CASA	2025
Reimagining a Future empowered by e-HKD Tokenised Deposits and Stablecoins	BCG	2024
Tokenisation de parts de fonds: Cas des fonds monétaires	CASA	2024
Tokenisation of SFC authorised investment products	SFC	2024
Tokenisation, Fund Administration and Transfer Agency Fee Proposal for Amundi	Standard Chartered	2025
Tokenised Fund Model: Financing and Securities Services	Standard Chartered	2025
Tokenization & retaliation: The future of finance & the power of digital assets	PwC	2024

9.3 Interviews

Figure 40 Interviews

Title	Name	Company	Date
Managing Director, Head of Marketing & Product, Asia	Jimmy Ng	Amundi Hong Kong	2025 05
Business Intelligence Analyst	Théo Lecardonnel	Amundi Hong Kong	2025 05
Asia Chief of Staff	Gloria Lau	Amundi Hong Kong	2025 05

Regional COO - Hong Kong, China, Taiwan	Julien Bernard	Amundi Hong Kong	2025 05
Head of Liquidity Solutions Business Development, Europe	Stephanie Akhal	Amundi	2025 05
Global Head of Corporate and Corporate Pension Funds Clients	Sandrine Rougeron	Amundi	2025 05
Head of Products France	Eddy Arnaud	Amundi	2025 05
Responsible for regulatory and transversal product transformation	Pierre Joly	Amundi	2025 05
Head Business Development - Investments	Jasraj Thakur	Amundi	2025 05
Chief of staff Investment Management (Business, Transformation, Oversight)	Clarisse Djabbari	Amundi	2025 05
Compliance SFC/CPL/FSE	Franck Gosset	Compliance	
Head of Compliance Advisory in Investment Solutions	Rim Compan	Compliance	
Group Head of Digital Assets	Laurent Majchrzak	CACEIS Luxembourg	2025 05
Group Product Manager, Digital Assets	Sorinnicusor Jitaru	CACEIS Luxembourg	2025 05
Digital Assets Regulatory Senior Expert	Hubert Grignon Dumoulin	CACEIS Luxembourg	2025 05
Group Product Manager, Digital Assets	Samantha Job	CACEIS Luxembourg	2025 05
	Didier Hernandez	CACEIS Luxembourg	2025 05
Co-General Manager, Head of Retail Division, Marketing and Products	Paolo Proli	Amundi Italy	2025 05
Global Head of Institutional Coverage	Francesca Ciceri	Amundi Italy	
Head of Group Insurance & Banks Coverage	Alexandra Vangyseghem	Amundi	
Head of Business Development Asia ex Japan	Marie-Pascale Bonhomme	Amundi Singapore	
CEO/CHA	Xiaofeng Zhong	Amundi Hong Kong	2025 05
Deputy Group CIO	Philippe d'Orgeval	Amundi	
Head of Fixed Income	Amaury Dorsay	Amundi	
COO	Michael Martineau	Fund Channel	2025 05
Global Head of Corporate Development and Transformation	Guillaume Fay	Amundi	
Global head of business support and operations	Jeanne Duvoux	Amundi	
COO	Julien Genis	Amundi Italy	2025 05
Deputy CEO - Conducting Officer Risk, Compliance and Legal,	Karine Laurencin	Amundi Luxembourg	2025 05
Global Head of Business Development – Services & Solutions	Bertrand Pujol	Amundi	2025 05
COO - Institutional and Corporate Division	Thomas Pietri	Amundi	2025 06
CEO	Pierre-Adrien Domon	Fund Channel	
Head - International Products and Partnership	Cyril Vergneau	SBI Mutual Fund	
Head of Investment Strategy, Money Market Business Line	Patrick Carletto	Amundi	2025 05

Global Head of Partnerships Strategy	Fabrice van Moere	Amundi	2025 05
Deputy Global Head of Partnerships Strategy	Paul Blumenfeld	Amundi	2025 05
COO Investment	Anne Martel	Amundi	2025 05
Head of Distribution France	Isaure Chabannes Wright	Amundi	2025 06
Chief A.I. & Digital Officer	Matthieu Keip	Amundi	2025 05
Head of Public Affairs	Aurelie Cassou	Amundi	2025 05
Head of Legal Products	Anna Chiara Chisari	Amundi Italy	2025 05
Head of Legal Capital Markets	Isabelle Drinkuth	Amundi	2025 05
Public Affairs Director	Andreea Pencea	Amundi	2025 05
Investment Innovation Intern	Benjamin Botella	Amundi Hong Kong	2025 06

9.4 Conferences

Figure 41 Conferences

Conference Name	Job Title	Speaker	Company	Date
Redefining Assets: Tokenisation and the Future of Investment: Opening remarks	Director General	Tanguy van de Werve	EFAMA	2025 05
Keynote from European Commission	Advisor, Technological Innovation & Cyber Security	Peter Kerstens	DG FISMA European Commission	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Head of Innovation and Operations Unit	John Allan	The Investment Association	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Vice-President Legal	Dr. Tim Kreutzmann	BVI	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Director Legal Affairs	Roberta D'Apice	Assogestioni	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Investment Funds Partner Luxembourg	Raoul Heinen	Linklaters	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Senior Manager, Industry Collaboration	Ruth Fairclough	Irish Funds	2025 05
Regulation as enabler, a perspective from emerging European DLT hubs	Innovation Leader, Blockchain Officer	Olivier Taille	Natixis Investment Managers	2025 05
Tokenising Funds: the case for Money Market and Linked Funds	Chief Executive Officer	Christophe Lepitre	ZNES	2025 05
Tokenising Funds: the case for Money Market and Linked Funds	Senior Investment Director	Alastair Sewell	Aviva Investors	2025 05
Tokenising Funds: the case for Money Market and Linked Funds	Head of Unit Linked Assets	Rémi Cuinat	Generali France	2025 05
Tokenising Funds: the case for Money Market and Linked Funds	Digital Products & Solutions Manager	Kim Beuttler	DWS	2025 05
Tokenising Funds: the case for Money Market and Linked Funds	Managing Director, Head of Global Liquidity Product & Morgan Money	Paul Przybylski	J.P. Morgan Asset Management	2025 05

Fireside chat: One asset manager's tokenisation journey	Head of Tokenisation & Digital Assets	Christoph Hock	Union Investment	2025 05
Where is the Money? Digital euro, Stablecoin and Commercial Bank Money	Head of Division, Market Innovation and Integration	Holger Neuhaus	European Central Bank	2025 05
Where is the Money? Digital euro, Stablecoin and Commercial Bank Money	Chief Customer Officer	Martin Lawrence	the ValueExchange	2025 05
Where is the Money? Digital euro, Stablecoin and Commercial Bank Money	Chief Commercial Officer	Rupertus Rothenhauser	AllUnity	2025 05
Where is the Money? Digital euro, Stablecoin and Commercial Bank Money	Expert Digital Currencies	Liv Tschee-Wegert	DZ BANK	2025 05
Global Perspectives on Tokenisation: Innovation and Regulation Across Europe, Switzerland, the US, and Asia	Digital Securities - Sales EMEA	Martin Weithofer	SIX Digital Exchange	2025 05
Global Perspectives on Tokenisation: Innovation and Regulation Across Europe, Switzerland, the US, and Asia	Managing Director, Head of Global Liquidity Product & Morgan Money	Paul Przybylski	J.P. Morgan Asset Management	2025 05
Global Perspectives on Tokenisation: Innovation and Regulation Across Europe, Switzerland, the US, and Asia	Managing Director	Ruben Nieto Martin-Vares	Allfunds Blockchain	2025 05
Global Perspectives on Tokenisation: Innovation and Regulation Across Europe, Switzerland, the US, and Asia	CEO	Laurent Marochini	Standard Chartered Luxembourg	2025 05

10 Table of Figures

11 Appendix

Table of Contents:

Amundi Business Intelligence
business.intelligence@amundi.com

11.1 Fundamentals

11.1.1 Token Issuance

Creating a token on a blockchain is primarily done via smart contracts, which defines the token's rules and functionalities. Smart contracts can be programmed to verify conditions of execution to mimic financial instrument business rules. Smart contracts are ideal for automating and enforcing financial transactions based on predefined rules. These can include custom logic to verify and enforce conditions before execution, such as:

- Regulatory compliance checks (KYC, AML)
- Contractual obligations (e.g., dividend payments)
- Market conditions (e.g., interest rate changes)
- Counterparty verification (e.g., DVP, escrow)
- Settlement conditions (e.g., trade confirmation)
- Triggers based on external data (oracles)

For the issuance of Fund tokens two logics are critical:

- Add a **mint()** function to allow more token creation (to mimic the Subscriptions of shares)
- Implement a **burn()** function to destroy tokens (to mimic the Redemption of shares)

Looking at the "Subscription" process, there are different ways to activate the related "mint" function in a fund tokenization smart contract:

1. **Manual Activation by Fund Manager** (Centralized Approach): Only an ***authorized address*** (fund manager) can issue new fund tokens. Investors send money to the fund's bank account or deposit stablecoins. The manager calls the mint() function to issue fund tokens.
2. **Investor Subscription Trigger (Semi-Automated):** Investors send stablecoins (e.g., USDC, DAI) to the smart contract. The contract verifies payment and automatically mints tokens. NAV-based pricing ensures correct token issuance.
3. **Smart Contract with Oracle Integration (Fully Automated):** NAV is fetched from an Oracle (e.g., Chainlink). Investors subscribe by sending funds. Smart contract mints tokens based on the real-time NAV.

Minting is the process of **creating new tokens on a blockchain**. When minting is restricted to authorized addresses, only approved accounts can generate new tokens (like a Transfer Agent)

Here is how it works:

- A smart contract defines **minting rules** (e.g., only specific addresses can mint).
- An authorized address (e.g., fund manager or its Transfer Agent) calls the mint() function.
- The contract verifies if the caller is **authorized**.
- If authorized, new tokens are created and assigned to the designated address.
- The **total supply of tokens** updates automatically.

The minting and **transfer of tokens** (mimicking the issuance and transfer of shares) can be done in different ways, depending on the smart contract design:

- **Direct Transfer –** The minter (ManCo / TA) manually sends tokens to another address using **transfer()** function.

- **Automatic Distribution –** The smart contract automatically distributes newly minted tokens.
- **Investor Subscription Model –** Investors send funds, and the smart contract mints and transfers tokens to them.

An important aspect for financial instruments and more precisely for Investment Funds to comply with existing rules and regulations is to **restrict the transferability of shares** (“tokens”) to an unknown holder.

This is possible via the **smart contract**. A smart contract can **enforce transfer restrictions** to prevent tokens from being sent between specific addresses or to restrict transfers entirely.

Ways to **Restrict Token Transfers**:

- **Whitelisting** (Only Allowed Addresses Can Transfer)
- **Role-Based Transfers** (Only Admins Can Transfer)
- **Transfer Rules Based** on KYC or Regulatory Compliance

11.1.2 Access to Tokens

Investors can access tokens via wallet interfaces, DApps or Custom Dashboards. These will be provided by a financial intermediary (“Distributor”) who ensure compliancy with distribution rules. The Distributor can be the fund promoter itself (“direct distribution”).

Wallet / dApp / Dashboard interact with a smart contract in order to:

- Check balance and position directly from a Smart Contract (balanceOf()) or via dApp or Dashboard.
- Request to issue new shares or to redeem shares. A token holder can request new tokens by interacting with a smart contract's mint function, but the request needs to be validated based on predefined business rules.

11.1.3 Transaction and Store Tokens

A transaction in a blockchain is a data structure that records an event (e.g., transfer of funds, contract execution, minting tokens). Each transaction is **stored immutably in a block** and includes various pieces of information.

It is very important to distinguish between a database, where an information is recorded inside a table, and the recording of an event in a log. A representation of a total amount of shares held by an investor in a blockchain is a result of on-fly sum of buy and sold events.

A blockchain transaction typically includes the following information:

Figure 42 Information included in a blockchain transaction

Field	Description
Sender Address	The wallet address initiating the transaction.
Receiver Address	The wallet or contract receiving the transaction.
Amount	The number of tokens or assets being transferred.
Gas Fee	The fee paid to process the transaction (e.g., Ethereum gas fees).
Nonce	A counter used to prevent transaction replay attacks.
Transaction Hash	A unique identifier (hash) for the transaction.
Block Number	The block where the transaction is recorded.
Timestamp	The exact time the transaction was processed.
Smart Contract Data (if applicable)	If interacting with a smart contract, it includes method calls and parameters.

Source: Tokenised Funds Consideration Paper 2025 (ALFI) 2025 02

While it is possible to add additional information by programming a Smart Contract, it shall be considered that, as of today, blockchains are optimized for transactions, not large data storage. Instead, off-chain storage solutions are used to complete and enrich the transaction information, with a reference stored on-chain.

For investment funds, for instance, the Fund Name does not need to be recorded in a transaction while it is sufficient to store the ISIN.

11.1.4 Technology Providers

Insourcing Tokenization Services

Advantages:

1. **Control and Customization**: Developing an internal team allows asset managers to maintain full control over the tokenization process. This can lead to more tailored solutions that align closely with the firm's strategic goals and specific requirements.
2. **Data Security**: By keeping tokenization in-house, asset managers can better safeguard sensitive data and proprietary information, reducing the risk of data breaches associated with third-party providers.
3. **Integration with Existing Systems**: Internal teams can ensure seamless integration of tokenization processes with existing IT infrastructure, potentially leading to more efficient operations and reduced compatibility issues.
4. **Long-term Cost Efficiency**: While the initial setup costs may be high, insourcing can be more cost-effective in the long run, as it eliminates ongoing fees paid to external providers.

Challenges:

1. **High Initial Investment**: Building an internal tokenization capability requires significant upfront investment in technology, talent, and training.

2. **Resource Intensive**: Maintaining an in-house team demands continuous investment in skills development and technology upgrades to keep pace with industry advancements.
3. **Scalability Issues**: Scaling operations to handle increased demand or new projects can be challenging without the flexibility that external providers might offer.

Outsourcing Tokenization Services

Advantages:

1. **Access to Expertise**: External providers often have specialized knowledge and experience in tokenization, which can lead to more efficient and effective implementation.
2. **Cost Savings**: Outsourcing can reduce the need for large capital expenditures on technology and personnel, converting these into more predictable operational expenses.
3. **Scalability and Flexibility**: External providers can offer scalable solutions that can be adjusted based on the asset manager's needs, providing flexibility to adapt to market changes.
4. **Speed to Market**: Leveraging the expertise and infrastructure of an external provider can accelerate the deployment of tokenization services, allowing asset managers to capitalize on market opportunities more quickly.

Challenges:

1. **Less Control**: Outsourcing can lead to a loss of control over the tokenization process, which may result in solutions that are less tailored to the asset manager's specific needs.
2. **Data Security Concerns**: Sharing sensitive data with third-party providers can increase the risk of data breaches and compliance issues.
3. **Dependency on Providers**: Relying on external providers can create dependency, which might be problematic if the provider faces operational issues or changes its strategic direction.

11.1.5 Digital Licensing

Digital licensing is the framework that governs who can do what with tokenised fund units, managed via code-based rules rather than manual legal agreements. This framework ensures that the use and transfer of tokens are controlled and compliant with relevant regulations.

The key elements of digital licensing include access control, jurisdictional compliance, distribution rights, and usage rights. Access control ensures that only authorised investors, such as those who are KYC/AML compliant, can buy, hold, or transfer tokens. Jurisdictional compliance restricts token use based on the investor's location; for example, US investors cannot access non-SEC-registered products. Distribution rights control which distributors or platforms are authorised to sell the tokenised fund. Usage rights define specific rights related to the tokens, such as transferability, lock-up periods, redemption rights, and voting rights.

Digital licensing is implemented through smart contracts that automatically enforce licensing terms, such as allowing transfers only if the recipient is whitelisted. Token standards like ERC-1400 or ERC-3643, which are used for security tokens, embed compliance rules and licensing features directly into the token logic. Additionally, identity layers, such as digital wallets linked to verified investors, ensure that transactions meet regulatory and licensing requirements.

The benefits of digital licensing in fund tokenisation are significant. Automation eliminates the need for intermediaries to enforce rules. Programmable compliance allows for real-time enforcement of complex licensing terms. The system provides auditability through a transparent and immutable history of rights, transfers, and usage. Finally, digital licensing increases efficiency by reducing legal and operational friction.

In fund tokenisation, digital licensing services are typically provided by a combination of tokenisation platforms, blockchain infrastructure providers, digital identity and compliance service providers, and smart contract developers with legal-tech integrations. Together, they enable secure token creation, regulatory compliance, identity verification, and automated enforcement of licensing terms.

11.2 Regulation

11.2.1 Overview of Digital Asset Regulation Worldwide

Figure 43 Overview of Digital Asset Regulation Worldwide

Country/ Region	Name of Legislation/ Regulation	Year of Application	Description
EU	Regulation (EU) 2022/858 (DLT Pilot Regime)	2023	Pilot regime enabling issuance, trading, and settlement of tokenized financial instruments with exemptions.
Luxembourg	Law of 15 March 2023	2023	Implements Pilot Regime and modifies financial instrument definitions to include DLT-based assets.
Luxembourg	Blockchain Law IV	2024	Enhances legal framework for DLT in financial sector, allowing securities transactions on distributed ledgers.
Italy	Decree No. 25/2023 (FinTech Decree)	2023	Establishes digital issuance and circulation of financial instruments on blockchain with Register Manager role.
Italy	Consob Regulation on DLT Financial Instruments	2023	Defines principles for Register Managers and implementation of DLT-based financial instruments.
France	Blockchain Ordinance	2017	Introduces DEEP, allowing blockchain as a register for unlisted securities.
France	Pacte Law	2019	Regulatory framework for crypto-assets, ICOs, and digital asset service providers under AMF supervision.
France	AMF Instruction DOC-2024-07	2024	Guidance on implementing the EU Pilot Regime in France for tokenized funds.
Ireland	Central Bank Q&A on Digital Assets	2021	Clarifies that tokenized traditional assets are allowed under UCITS and AIFMD frameworks.

Ireland	Amendment to Irish MiFID Regulations	2023	Revises definition of financial instruments to include those issued via DLT.
UK	FCA Technology Working Group Reports	2023, 2024	Phased approach to fund tokenization within existing legal framework and enhanced disclosures.
UK	Digital Securities Sandbox (DSS)	2024	Regulated live environment for DLT innovation in financial market infrastructures until 2028.
Hong Kong	SFC Circulars on Tokenized Investment Products	2023	Guidance on regulatory compliance and investor protection for tokenized funds.
Hong Kong	HKMA Circulars on Digital Asset Custody and Distribution	2024	Supervisory standards for authorized institutions dealing with digital assets.
Hong Kong	Project Ensemble Sandbox	2024	Regulatory sandbox exploring tokenized deposits and interbank settlement mechanisms.
Singapore	Securities and Futures Act (SFA)	2001	Governs tokenized fund units qualifying as capital markets products with licensing requirements.
Singapore	Guardian Funds Framework	2024	Best practices for tokenized funds including on-chain registers and investor rights protection.
Singapore	Project Guardian Sandbox	2022	Sandbox for testing DLT applications in financial services with multiple pilot trials.
South Korea	Financial Services and Capital Markets Act (FSCMA)	Ongoing	Regulates tokenized securities as traditional securities under existing capital markets laws.
South Korea	Digital Securities Guidelines	2023	Guidelines for issuance, trading, and custody of digitally tokenized securities.
Malaysia	Proposed Regulatory Framework (Consultation Paper)	2025	Technology-neutral framework for digital twin tokenization of capital market products.
Malaysia	Tokenized Bonds and Sukuk Initiative	2025	Plans to introduce tokenized bonds and sukuk to enhance retail participation.
United Arab Emirates	Securities and Commodities Authority (SCA) Framework	Ongoing	Regulates securities token offerings including tokenized fund units with licensing and disclosures.
United Arab Emirates	Dubai Financial Services Authority (DFSA) Investment Tokens Regime	2021-2022	Recognizes DLT-based fund units as securities under DIFC laws with AML/CFT compliance.
United Arab Emirates	Financial Services Regulatory Authority (FSRA) Framework	Ongoing	Classifies tokenized funds as Collective Investment Schemes requiring licensing.
United Arab Emirates	Real Estate Tokenization Project Pilot Phase	2025	Blockchain-based fractional ownership and liquidity for real estate funds.
United States	Securities Act of 1933 and Exchange Act of 1934	Ongoing	Tokenized funds treated as securities requiring registration or exemptions.
United States	Investment Company Act of 1940	Ongoing	Applies to tokenized mutual funds and ETFs with custody and oversight requirements.
United States	GENIUS Act (Guiding and Establishing National Innovation for U.S. Stablecoins Act)	2025	Proposes federal regulatory framework for payment stablecoins addressing financial stability.

11.2.2 Project Guardian (Singapore) - Members

Members

The initiative involves a **Policymaker Group** that includes members such as:

1. Banque de France
2. Deutsche Bundesbank
3. Financial Conduct Authority (UK)
4. Financial Services Agency (Japan)
5. International Monetary Fund
6. Monetary Authority of Singapore
7. Swiss Financial Market Supervisory Authority
8. World Bank

The **Industry Group** comprises financial institutions participating in Project Guardian, including:

1. ADDX
2. Alta Exchange
3. Ant Group
4. Apollo
5. Australia and New Zealand Banking Group
6. BNY Mellon
7. Citi
8. DBS Bank
9. Deutsche Bank
10. Euroclear
11. Fidelity
12. Franklin Templeton
13. Hamilton Lane
14. Hongkong and Shanghai Banking Corporation
15. J.P. Morgan Chase & Co.
16. Moody's
17. Northern Trust
18. OCBC Singapore
19. Phillip Securities
20. S&P Global
21. SBI Digital Asset Holdings
22. Schroder Investment Management Limited
23. SGX Group
24. Standard Chartered
25. T. Rowe Price Associates, Inc.
26. UBS Group
27. United Overseas Bank Limited

The project also involves various **Associations and Cooperatives**, including:

1. Capital Markets and Technology Association (CMTA)
2. Global Financial Markets Association (GFMA)
3. International Capital Market Association (ICMA)
4. International Swaps and Derivatives Association (ISDA)
5. Society for Worldwide Interbank Financial Telecommunications (Swift)

11.2.3 Project Ensemble (HK) - Members

Members

The Project Ensemble Architecture Community comprises a diverse group of stakeholders:

Here’s the categorized and alphabetically sorted list of entities, avoiding duplicates:

Regulatory Bodies

1. BIS 4Innovation Hub Hong Kong Centre
2. CBDC Expert Group
3. Hong Kong Monetary Authority (HKMA)
4. Hong Kong Exchanges and Clearing Limited
5. Securities and Futures Commission (SFC)

Financial Institutions

1. Bank of China (Hong Kong)
2. BlackRock
3. BOCHK Asset Management Limited
4. Bosera Asset Management (International)
5. China Asset Management (Hong Kong)
6. China Construction Bank (Asia) Corporation
7. Cinda International Asset Management
8. CSOP Asset Management
9. Fubon Bank (Hong Kong)
10. Fosun Wealth International
11. Franklin Templeton
12. Hang Seng Bank
13. HSBC
14. JETCO
15. JPMorgan Chase
16. Northern Trust
17. Solomon JFZ (Asia)
18. Standard Chartered Bank (Hong Kong)

Technology and Digital Asset Firms

1. Ant Digital Technologies
2. Ant International
3. Cyberport
4. EVIDENT
5. HashKey Group
6. Innoblock
7. Linked Charge
8. Longshine Group
9. OSL Digital Securities Limited
10. Global Shipping Business Network Limited
11. ICC Digital Standards Initiative

11.3 Market Sizing

11.3.1 BCG & McKinsey

Source	Projection : 2030	
BCG	**Low band:** $600bn	**High band:** +$1tn

The Boston Consulting Group (BCG) forecasts significant growth in the fund tokenization market, estimating that tokenized funds could reach about 1% of global mutual fund and ETF assets under management (AUM) by 2030. This would imply an AUM exceeding $600 billion. If regulators allow the conversion of existing mutual funds and ETFs into tokenized funds, the market size could potentially expand into the trillions of dollars.

Key assumptions and points underlying this forecast include:

Historical Analogy: BCG suggests that tokenized funds are expected to follow a similar adoption curve to that of exchange-traded funds (ETFs), which reached about 1% of total fund AUM within seven years after the first ETF launched in 1993.

Market Growth Drivers:

On-chain money innovation, particularly the use of stablecoins by early adopters such as virtual asset owners, is expected to create a flywheel effect.

The launch of tokenized deposits and central bank digital currencies (CBDCs) will further accelerate scaling.

First movers among asset managers are likely to capture significant market share by offering simple products that build brand recognition and economies of scale.

Regulatory and Technical Foundations: Realizing this potential depends on establishing clear regulations, global operating standards, and technical interoperability.

McKinsey	**Low band:** $300bn	**High band:** $1.2tn

McKinsey forecasts that the tokenized fund market will reach approximately $600 billion by 2030, with a broader tokenized market capitalization of around $2 trillion across various real world financial asset classes. The forecast range spans from approximately $1 trillion in a pessimistic scenario to about $4 trillion in an optimistic one. This growth is expected to be driven mainly by asset classes such as mutual funds, bonds and exchange-traded notes (ETNs), loans and securitization, and alternative funds.

Key assumptions underlying this forecast include:

Adoption will occur in multiple waves, starting with asset classes and use cases that have proven return on investment, existing scale, and higher technical and regulatory feasibility.

Asset classes with larger market value, higher friction in current processes, less mature traditional infrastructure, or lower liquidity are more likely to benefit significantly from tokenization.

Regulatory clarity, infrastructure maturity, interoperability, and buy-side demand will influence adoption rates and vary by geography.

The appetite for investing in tokenization depends inversely on the richness of fees earned from current less efficient processes and whether functions are in-house or outsourced.

High-profile successes or failures in tokenization could either propel or restrict further adoption.

Overall, McKinsey expects tokenization to accelerate as network effects gain momentum, with institutions assessing which assets would benefit most from transitioning to tokenized products to capture strategic advantages.

11.3.2 Accenture

According to Accenture's dedicated analysis for CASA, the estimated market size for the entire digital assets value chain in Europe from 2025 to 2030 is around €15 billion. This value chain encompasses various components, including digital asset custody, primary and secondary markets, access to digital assets, loans/financing/payments, and asset management. Within this value chain, asset managers are expected to play only a small role, primarily in the tokenization of funds, while retail banks and investment banks are anticipated to take on the most significant responsibilities.

Amundi Business Intelligence
business.intelligence@amundi.com

11.3.3 Bain & Company and Onyx

Bain & Company and Onyx by JP Morgan estimate that the tokenization of alternative funds could unlock a potential $400 billion revenue opportunity, with $270 billion of that opportunity specifically for fund managers.

Figure 44 Bain & Company and Onyx by JP Morgan: Key Figures and Methodology

Key figures	Methodology	
20% target allocation to alternatives	• Market participant interviews cited 15%–20% as a target alternatives allocation • Ultra-high-net-worth investors have 19% allocations • Average allocation across unconstrained institutions (endowments, foundations, and sovereign wealth funds) is around 40%	
$400 billion full-potential revenue opportunity	• High-net-worth individuals have $80 trillion in investable assets • Assuming an increase from 5% to 20% results in $12 trillion in flows to alternatives (15% multiplied by $80 trillion) • Revenue derived from fees associated with incremental assets and additional liquidity and collateralization features (such as increased management fees and carried interest for fund managers)	
Revenue drivers	• **Fund managers:** Management fees, carried interest • **Wealth managers:** Revenue share with fund managers, lending revenue, trading fees	• **Wholesale platforms:** Platform fees, trading fees • **Fund administrators and transfer agents:** Increased assets under administration

Note: Additional information regarding revenue sizing is available upon request

Source: Tokenization Distributing Alternative to Individuals (Bain) - 2023 12

Their methodology is based on the following assumptions:

1. High-net-worth individuals (HNWI) will have the same level of allocation to alternatives as ultra-high-net-worth individuals (UHNWI).
2. All HNWI allocations to alternatives will be directed toward alternative funds, despite the reality that a significant portion of HNWI real estate allocation is typically invested in physical real estate.
3. All HNWI allocations to alternative funds will be invested in tokenized alternative funds.

Given these assumptions, we believe their estimation is **largely overestimated** and should be considered more as a ceiling for potential revenue gains for fund managers.

11.4 Distribution

11.4.1 Tokenization and Distribution Services Providers List (Sample)

Figure 45 Tokenization and Distribution Services Providers List (Sample)

	Business Region / Main Services	Description
UBS Tokenize	Asia, Singapore Tokenization	UBS Tokenize is a comprehensive platform developed by UBS Group to facilitate the creation, issuance, distribution, and custody of tokenized assets. It aims to integrate traditional financial assets into the decentralized finance (DeFi) world through blockchain technology, providing end-to-end solutions for asset managers seeking comprehensive tokenization services. UBS Tokenize is designed to bring institutional-grade infrastructure to digital assets, supporting the origination and management of a wide range of tokenized assets, including bonds, funds, and structured products. The platform is part of UBS's broader strategy to leverage blockchain technology for financial innovation, focusing on regulated financial assets to maximize value chain benefits.
Securitize	United States Tokenization Transfer Agency Distribution	Securitize is a specialized end-to-end platform focused on the tokenization of real-world assets, providing comprehensive services that enable the creation and management of digital tokens across various asset classes, such as private equity, private credit, venture capital, treasury funds, and real estate investment trusts (REITs). By leveraging blockchain technology, Securitize facilitates fractional ownership and digital asset creation, making digital investments more accessible. As of April 2025, USD800 million has been invested through the platform by around 125,000 individuals or entities. Securitize operates as a full-stack technology and services platform, offering features and specialized tools for both investors and issuers.
Archax	United Kingdom Tokenization Distribution	Archax is a regulated digital securities exchange based in London, offering a comprehensive platform for trading tokenized assets. As the first digital securities exchange to be regulated by the Financial Conduct Authority (FCA) in the UK, Archax provides a credible bridge between the blockchain-centric crypto community and the traditional investment space. It caters primarily to institutional investors, offering a robust infrastructure for trading a wide range of digital assets. The platform is designed to integrate seamlessly into existing institutional trading workflows, providing a familiar environment for traditional investors to engage with digital assets.
Libre Capital	United Kingdom Tokenization	LIBRE is a comprehensive platform dedicated to the tokenization of real-world assets (RWAs), offering a full suite of services that integrate blockchain technology into traditional financial systems. As a full-service provider, LIBRE caters to asset managers and institutional investors by providing solutions that include collateralized lending, secondary trading, and multi-chain interoperability. LIBRE is designed to bring institutional-grade infrastructure to the digital asset space, focusing on regulated RWAs. The platform provides blockchain infrastructure that connects asset managers with digital distribution channels, expanding institutional access to alternative investment funds. By leveraging blockchain technology, LIBRE aims to streamline the process of tokenizing assets, enhancing capital efficiency and reducing the need for intermediaries.

Amundi Business Intelligence
business.intelligence@amundi.com

Calastone	United Kingdom (also located in Lux, Asia and the US) Tokenization	Calastone is a global network that specializes in integrating blockchain technology into existing financial systems, facilitating the transition to digital asset management. As a consultancy and integrator, Calastone provides strategic advice and technical integration services to help traditional financial institutions embrace blockchain-based systems. A key component of their offering is the "Tokenised Distribution" division, which focuses on transforming traditional funds into digital tokens.
OSL Digital Securities	Hong Kong Distribution	OSL Digital Securities is a platform provider that offers trading solutions for digital assets, focusing on security and regulatory compliance. As the world's first insured and SFC-licensed digital asset platform, OSL provides a comprehensive suite of services, including brokerage, exchange, custody, and SaaS solutions, tailored for institutional clients and professional investors. OSL is recognized for its robust infrastructure and commitment to regulatory compliance, setting industry benchmarks in the digital asset space. The platform is designed to facilitate seamless and secure trading operations across global markets, leveraging advanced technology to meet the needs of institutional investors.
Spiko	France Fund Management Distribution	Spiko is a fintech platform specializing in the tokenization of financial instruments, particularly money market funds within the European Union. The platform is designed to offer seamless access to risk-free rates in euros and dollars, targeting both businesses and individuals. Spiko aims to lead in the tokenization of financial instruments, providing financial products with fully tokenized shares. Founded in 2023, Spiko focuses on transforming traditional financial instruments into digital tokens, allowing users to earn daily interest on their cash holdings. The platform provides frictionless experience for accessing money market funds, ensuring liquidity and flexibility without the constraints of traditional term deposits. Spiko's products are backed by Treasury Bills issued by stable Eurozone countries and the United States, offering a secure and reliable investment option.
IZNES	France, Europe Tokenization Distribution (B2B)	IZNES is a pioneering platform that integrates blockchain technology into asset management processes, focusing on enhancing operational efficiency and compliance. As a consultancy and integrator, IZNES provides strategic advice and technical integration services to help traditional financial institutions transition to blockchain-based systems. The platform is recognized as the first European marketplace operated on blockchain for investments in fund shares. IZNES offers a comprehensive solution for the digitalization of fund distribution, leveraging blockchain technology to streamline operations and improve transparency. The platform facilitates the management of various securities operations, including dividend distribution, mergers, and nominal divisions, while ensuring compliance with regulatory requirements. By utilizing a private blockchain protocol, IZNES guarantees the confidentiality and security of user activities.
ADDX	Singapore	ADDX is a platform provider that specializes in offering trading solutions for tokenized assets, providing infrastructure for decentralized exchanges and interoperability solutions. As a regulated platform, ADDX is committed to making private markets accessible to a broader audience, including

	Tokenization Distribution (B2B2C)	individual investors, by lowering investment minimums and offering a diverse range of alternative investment opportunities. ADDX operates as a digital securities exchange, facilitating the trading of tokenized assets with a focus on security and regulatory compliance. The platform is licensed by the Monetary Authority of Singapore (MAS) as a Capital Markets Services licensee and Recognised Market Operator, ensuring that all operations adhere to stringent regulatory standards. ADDX aims to democratize access to private markets by offering investment opportunities that were traditionally available only to institutional players.
Allfunds Blockchain	Europe Tokenization Distribution (B2B)	Allfunds Blockchain is a specialized platform provider that focuses on offering trading platforms for tokenized assets and providing infrastructure for decentralized exchanges and interoperability solutions. By leveraging blockchain technology, Allfunds Blockchain aims to enhance the efficiency and security of fund distribution processes, catering to the needs of asset managers and distributors. Allfunds Blockchain is designed to integrate blockchain technology into the fund distribution ecosystem, providing a secure and scalable platform for managing digital assets. The platform offers a range of solutions that streamline operations, reduce costs, and enhance data security. By utilizing blockchain, Allfunds Blockchain enables seamless integration and interoperability across various financial systems, facilitating efficient and transparent transactions.
DigiFT	Singapore Distribution	DigiFT is a pioneering platform that operates as a regulated exchange for tokenized real-world assets (RWA), bridging the gap between traditional finance (TradFi) and decentralized finance (DeFi). By leveraging blockchain technology, DigiFT offers a comprehensive suite of services designed to facilitate the trading of digital assets, providing infrastructure for decentralized exchanges and interoperability solutions. DigiFT is built on the Ethereum blockchain and is recognized as the first regulated exchange for on-chain RWAs. The platform is designed to make innovative investment opportunities accessible to a broader audience by tokenizing assets such as bonds, equities, and other real-world investments. DigiFT's regulatory compliance is underscored by its successful graduation from the Monetary Authority of Singapore’s FinTech Regulatory Sandbox, emphasizing its commitment to innovation within a secure framework.
Kynexys	US Tokenization	Kinexys by JPMorgan is a sophisticated blockchain-based platform designed to modernize financial services by integrating blockchain technology into traditional systems. It offers comprehensive solutions that include tokenization, trading platforms, and regulatory compliance, catering to asset managers seeking end-to-end solutions. Kinexys serves as JPMorgan's blockchain infrastructure, aiming to transform how money, assets, and financial information are transferred. It leverages blockchain's composability, programmability, and interoperability to enhance efficiency, security, and automation in financial operations. As a bank-led initiative, Kinexys provides secure and scalable distributed ledger solutions for institutions worldwide.

FundsDLT	Luxembourg	FundsDLT is a platform provider that offers a trading infrastructure specifically designed for tokenized assets, with a focus on fund distribution. The platform aims to streamline the issuance, trading, and settlement of digital securities, making the process more efficient, transparent, and accessible for market participants. FundsDLT operates as a blockchain-based platform that facilitates the digitization of investment funds and other financial instruments. Its core proposition is to provide a secure, scalable, and interoperable environment where asset managers, distributors, and investors can interact seamlessly. The platform leverages distributed ledger technology (DLT) to automate and digitize key processes such as subscription, redemption, and secondary trading, reducing operational costs and settlement times.
	Tokenization Distribution	FundsDLT is registered and operates primarily in Luxembourg, a jurisdiction known for its progressive regulatory environment for fund management and digital securities. Luxembourg's well-established legal framework for investment funds and its support for blockchain innovation make it an ideal base for FundsDLT's operations. The platform's strategic location allows it to serve a broad European market, with plans and capabilities to extend its services across other European countries and beyond. Its involvement in cross-border projects and collaborations with industry consortia suggest an ambition to facilitate global interoperability, especially in regions with supportive regulatory environments like Switzerland, the UK, and Singapore.
Solowin	Hong Kong	Solowin is a Hong Kong-based platform specializing in the distribution and management of tokenized assets, with a focus on bridging traditional finance and blockchain technology. As a platform provider, Solowin offers a comprehensive infrastructure that supports the issuance, trading, and distribution of digital securities, including real-world assets (RWAs) and security token offerings (STOs). Its core mission is to facilitate the adoption of blockchain in asset management and capital markets, making these innovative solutions accessible to institutional and accredited investors.
	Distribution	Solowin operates as a Web3 distributor and agent, actively involved in tokenization projects such as money market funds (MMFs) and RWAs. The platform's role is to serve as an intermediary that connects asset managers, investors, and other market participants within a regulated environment. It leverages blockchain technology to enhance transparency, efficiency, and security in the distribution of tokenized assets, supporting the transition from traditional securities to digital tokens.

11.4.2 Tokenized Fund Distribution & Technology Providers Profile

11.4.2.1 Kinexys by JPMorgan

Overview of Kinexys

Kinexys by JPMorgan is a sophisticated blockchain-based platform designed to modernize financial services by integrating blockchain technology into traditional systems. It offers comprehensive solutions that include tokenization, trading platforms, and regulatory compliance, catering to asset managers seeking end-to-end solutions.

Kinexys serves as JPMorgan's blockchain infrastructure, aiming to transform how money, assets, and financial information are transferred. It leverages blockchain's composability, programmability, and interoperability to enhance efficiency, security, and automation in financial operations. As a bank-led initiative, Kinexys provides secure and scalable distributed ledger solutions for institutions worldwide.

Key Components

1. Digital Assets: Kinexys enables the tokenization of financial assets, increasing liquidity and efficiency while ensuring compliance with institutional standards. This feature allows enterprises to convert real-world assets (RWAs) such as bonds, real estate, and funds into programmable blockchain-based tokens. The Digital Assets category includes:

- ***Digital Financing:*** This tool allows for the settlement of repo transactions in minutes using blockchain technology, streamlining the process and reducing the time required for financial operations.
- ***Tokenized Collateral Network:*** This network enables the tokenization, movement, and use of assets as collateral, providing greater flexibility and utility for financial assets.
- ***Digital Debt Service:*** Built for the future of debt issuance, investment, and lifecycle management, this service supports the entire lifecycle of digital debt instruments.

2. Digital Payments: The platform facilitates near-instant, 24/7 cross-border transactions via a blockchain-based deposit ledger, reducing reliance on traditional banking rails. This capability enhances liquidity and enables multicurrency settlements, initially focusing on the U.S. dollar and euro. It includes:

- ***Programmable Payments:*** This tool automates and customizes payment processes seamlessly, allowing for more efficient and tailored financial transactions.

3. Liink: A peer-to-peer data-sharing network that enhances communication between financial institutions, streamlining compliance, settlement, and payment processes. Liink allows banks and fintechs to securely share KYC, compliance, and payments-related information, improving transaction efficiency and reducing errors. It includes:

- ***Confirm:*** Optimizes payment security and efficiency by validating account information.
- ***Route Logic:*** Enhances client experience on cross-currency payments and improves foreign exchange execution with near real-time convertibility intelligence validation.
- ***CheckMatch:*** Streamlines payments management by digitizing paper check conveyance and expediting check information transmission, helping to cut costs and processing times.

4. Labs: Kinexys Labs supports blockchain innovation through proof-of-concept development, helping institutions explore new financial applications. It provides a secure environment for testing smart contracts, tokenized instruments, and decentralized finance (DeFi) integrations. Labs is a hub for exploring blockchain and web3 technologies, enabling businesses to build next-generation digital solutions and turn visionary ideas into tangible business value.

Use Cases

- **Real-World Asset Tokenization:** Institutions can tokenize various assets, enhancing transparency and efficiency in asset management.
- **Institutional-Grade Digital Payments:** Facilitates 24/7 cross-border transactions with near-instant settlement, reducing costs and delays.
- **Seamless Financial Data Exchange:** Streamlines regulatory processes through secure data exchange.
- **On-Chain Settlement for Financial Markets:** Supports instant trading and settlement of tokenized assets, reducing counterparty risk.

11.4.2.2 UBS Tokenize

Overview of UBS Tokenize

UBS Tokenize is a comprehensive platform developed by UBS Group to facilitate the creation, issuance, distribution, and custody of tokenized assets. It aims to integrate traditional financial assets into the decentralized finance (DeFi) world through blockchain technology, providing end-to-end solutions for asset managers seeking comprehensive tokenization services.

UBS Tokenize is designed to bring institutional-grade infrastructure to digital assets, supporting the origination and management of a wide range of tokenized assets, including bonds, funds, and structured products. The platform is part of UBS's broader strategy to leverage blockchain technology for financial innovation, focusing on regulated financial assets to maximize value chain benefits.

Key Features

1. **Innovative Product Framework**: UBS Tokenize provides on-chain issuance functionality, allowing regulated financial assets to be tokenized and integrated into the blockchain world. This approach maximizes the benefits of blockchain technology while ensuring compliance with regulatory standards.
2. **Blockchain Agnosticism**: The platform supports multiple blockchain networks, offering an open architecture that ensures seamless integration into existing systems without reliance on a single technology. This flexibility allows UBS Tokenize to adapt to various technological environments and client needs.
3. **Regulated and Compliant Offerings**: UBS Tokenize ensures that all tokenized products meet regulatory standards, reducing risks and providing robust and compliant offerings. This focus on compliance is crucial for maintaining trust and security in digital asset transactions.
4. **Institutional-Grade Products**: Leveraging UBS's financial expertise and infrastructure, the platform creates flexible, adaptable services with strong governance structures. These products are designed to meet the needs of institutional clients, offering resilient solutions for new markets.

Tokenization Initiatives

UBS Tokenize has been involved in several notable tokenization projects, highlighting its capabilities in transforming traditional financial systems through blockchain technology. Examples include:

- **uMINT**: UBS Asset Management launched uMINT, a permissioned US Dollar Money Market Fund built on Ethereum technology. This fund focuses on high-quality US Dollar money market instruments, such as US Treasury bills, and is actively managed by UBS Asset Management. It primarily targets accredited investors and distributors.
- **Key4 Gold**: UBS conducted a proof-of-concept for its Key4 Gold offering on the Ethereum ZKsync network, exploring the use of zero-knowledge cryptography to enhance scalability and privacy. This initiative demonstrates UBS's commitment to leveraging advanced blockchain technologies for secure and efficient asset tokenization.

Roles Supported by UBS Tokenize

- **Issuer**: Expands product range using tokenized assets, connecting to emerging investment communities, and reducing technical requirements by opting for public or private blockchains.
- **Distributor**: Provides regulated tokenized services, ensuring transparent operations to meet compliance and security needs.
- **Data Provider**: Shares data via smart contracts, expanding product coverage and enabling seamless communication with other market participants.

11.4.2.3 Securitize

Overview of Securitize

Securitize is a specialized end-to-end platform focused on the tokenization of real-world assets, providing comprehensive services that enable the creation and management of digital tokens across various asset classes, such as private equity, private credit, venture capital, treasury funds, and real estate investment trusts (REITs). By leveraging blockchain technology, Securitize facilitates fractional ownership and digital asset creation, making digital investments more accessible. As of April 2025, USD800 million has been invested through the platform by around 125,000 individuals or entities.

Securitize operates as a full-stack technology and services platform, offering features and specialized tools for both investors and issuers. The platform allows users to manage their digital securities from a single, convenient dashboard, ensuring a secure environment for both investors and fundraisers. By registering ownership rights on the blockchain, Securitize provides a transparent and efficient process for tokenizing assets.

Securitize is recognized as the largest and most advanced distributor in the digital asset space, registered with the SEC and FINRA as a transfer agent and broker-dealer. The firm partners with major financial institutions such as KKR, Hamilton Lane, and BlackRock, managing both issuance and secondary trading while providing compliant digital onboarding and token lifecycle management. As of May 14, 2025, Securitize has facilitated $4 billion in on-chain investments. Backed by prominent firms like Coinbase and Morgan Stanley, it specializes in private equity, funds, and tokenized securities, positioning itself as a leader in institutional adoption.

Key Features

1. **Tokenization Services**: Securitize specializes in creating digital tokens that represent ownership in various asset classes, including private equity, real estate, and other alternative investments. This process involves converting traditional financial assets into digital securities, which can then be offered to a global pool of investors.
2. **Fractional Ownership**: By enabling fractional ownership, Securitize allows investors to purchase smaller portions of high-value assets, making it easier for individuals to diversify their investment portfolios and access opportunities that were previously out of reach.
3. **Regulatory Compliance**: The platform ensures compliance with regulatory standards, streamlining the fundraising process for issuers and providing a secure environment for investors. This focus on compliance helps mitigate risks and enhances trust in digital asset transactions.
4. **Comprehensive Solutions for Fundraisers**: Securitize offers a complete solution for raising capital by tokenizing assets. This includes creating digital securities, managing investor relations, and facilitating secondary market trading, all while ensuring adherence to regulatory requirements.

Tokenization Initiatives

Securitize has been involved in several notable tokenization projects, highlighting its capabilities in transforming traditional financial systems through blockchain technology. Examples include:

- **Real Estate Tokenization**: Securitize has facilitated the tokenization of real estate assets, allowing investors to gain exposure to property markets through digital securities. This initiative provides greater liquidity and transparency in real estate investments.
- **Private Equity and Venture Capital**: The platform has enabled the tokenization of private equity and venture capital funds, offering investors access to these asset classes with reduced minimum investment thresholds. This democratizes access to high-growth investment opportunities.

11.4.2.4 Archax

Overview of Archax

Archax is a regulated digital securities exchange based in London, offering a comprehensive platform for trading tokenized assets. As the first digital securities exchange to be regulated by the Financial Conduct Authority (FCA) in the UK, Archax provides a credible bridge between the blockchain-centric crypto community and the traditional investment space. It caters primarily to institutional investors, offering a robust infrastructure for trading a wide range of digital assets.

The platform is designed to integrate seamlessly into existing institutional trading workflows, providing a familiar environment for traditional investors to engage with digital assets.

Key Features

1. **Regulated Exchange**: Archax is the first FCA-regulated digital securities exchange, custodian, and brokerage. This regulatory approval provides a level

of trust and security that is crucial for institutional investors looking to trade digital assets.

2. **Comprehensive Trading Platform**: The platform supports trading in various digital assets, including cryptocurrencies and tokenized securities. Archax offers a full suite of services, including a crypto exchange, over-the-counter (OTC) trading, and custody solutions.
3. **Interoperability and Integration**: The platform integrates with multiple blockchain networks, including Ethereum, Algorand, and Solana, among others. This interoperability allows Archax to support a diverse range of tokenized assets and facilitates seamless trading across different blockchain ecosystems.

Tokenization Initiatives

Archax has been involved in several tokenization initiatives, highlighting its role in advancing the digital asset ecosystem. Examples include:

- **Tokenized Real-World Assets**: Archax has broadened its marketplace to include tokenized funds from major asset managers like BlackRock,Fidelity, Aberdeen, L&G.
- **Partnerships with Blockchain Projects**: Archax has partnered with blockchain projects such as Tezos to launch tokenized commodities like uranium.io platform.

Services for Institutional Clients

- **Crypto Exchange and OTC Trading**: Archax provides a regulated environment for trading cryptocurrencies and digital securities, offering both exchange and OTC trading options to meet the needs of institutional clients.
- **Custody Solutions**: The platform offers secure custody services for digital assets, ensuring that institutional investors can safely store and manage their holdings.
- **Regulatory Compliance**: Archax's FCA regulation ensures that all trading activities are conducted in compliance with UK financial regulations, providing peace of mind for investors.

Figure 46 Archax Fund Token Offering

Fund Manager	Issuer	Fund Name	Asset Class	Currency	Min. Inv.	Mgt Fee	Access Fee (Archax)
abrdn	abrdn Liquidity Fund (Lux)	US Dollar Fund	Money Markets	$	5000	0.10%	0,20%
abrdn	abrdn Liquidity Fund (Lux)	Sterling Fund	Money Markets	£	5000	0.10%	0,20%
abrdn	abrdn Liquidity Fund (Lux)	Euro Fund	Money Markets	€	5000	0.10%	0,20%
Baillie Gifford	Baillie Gifford Strategic Bond Feeder Fund		Bonds	£	100000	0.50%	0,20%
BlackRock	BlackRock ICS Funds	US Treasury Fund	Money Markets	$	5000	0.10%	0,20%

BlackRock	BlackRock ICS Funds	Sterling Gvt Liquidity Fund	Money Markets	£	5000	0.10%	0,20%
BlackRock	BlackRock ICS Funds	Euro Gvt Liquidity Fund	Money Markets	€	5000	0.10%	0,20%
Fidelity	Fidelity Institutional Liquidity Fund	USD Fund	Money Markets	$	5000	0.15%	0,20%
Fidelity	Fidelity Institutional Liquidity Fund	GBP Fund	Money Markets	£	5000	0.15%	0,20%
Fidelity	Fidelity Institutional Liquidity Fund	Euro Fund	Money Markets	€	5000	0.15%	0,20%
Legal & General	Legal & General Liquidity Funds	US Dollar Liquidity Fund	Money Markets	$	5000	0.10%	0,20%
Legal & General	Legal & General Liquidity Funds	Sterling Liquidity Fund	Money Markets	£	5000	0.10%	0,20%
Legal & General	Legal & General Liquidity Funds	Euro Liquidity Fund	Money Markets	€	5000	0.10%	0,20%
State Street	State Street Liquidity LVNAV Funds	USD Liquidity LVNAV Fund	Money Markets	$	5000	0.10%	0,20%
State Street	State Street Liquidity LVNAV Funds	GBP Liquidity LVNAV Fund	Money Markets	£	5000	0.10%	0,20%
State Street	State Street Liquidity LVNAV Funds	EUR Liquidity LVNAV Fund	Money Markets	€	5000	0.10%	0,20%

11.4.2.5 LIBRE

Overview of LIBRE

LIBRE is a comprehensive platform dedicated to the tokenization of real-world assets (RWAs), offering a full suite of services that integrate blockchain technology into traditional financial systems. As a full-service provider, LIBRE caters to asset managers and institutional investors by providing solutions that include collateralized lending, secondary trading, and multi-chain interoperability.

LIBRE is designed to bring institutional-grade infrastructure to the digital asset space, focusing on regulated RWAs. The platform provides blockchain infrastructure that connects asset managers with digital distribution channels, expanding institutional access to alternative investment funds. By leveraging blockchain technology, LIBRE aims to streamline the process of tokenizing assets, enhancing capital efficiency and reducing the need for intermediaries.

Key Features

1. **Tokenization of Real-World Assets**: LIBRE specializes in the tokenization of various asset classes, including funds and commodities. This process involves creating digital representations of physical assets, allowing them to be traded and managed on blockchain networks.
2. **Collateralized Lending**: The platform offers collateralized lending solutions, enabling investors to leverage their tokenized assets to secure loans. This feature provides liquidity and flexibility, allowing investors to access capital without liquidating their holdings.

3. **Secondary Trading**: LIBRE facilitates secondary market transactions, providing a platform for trading tokenized assets. This service enhances liquidity and allows investors to buy and sell assets with ease.
4. **Multi-Chain Interoperability**: Through its integration with LayerZero, LIBRE ensures that its tokenized assets can exist across multiple blockchain networks, including Ethereum, Solana, and Aptos. This interoperability enhances cross-chain liquidity and operational efficiency, making it easier for institutions to manage assets across different blockchains.

Tokenization Initiatives

LIBRE has been involved in several notable tokenization projects, highlighting its role in advancing the digital asset ecosystem. Examples include:

- **Integration with LayerZero**: By integrating with LayerZero, LIBRE has expanded its reach to over 120 blockchain networks, ensuring seamless interoperability and compliance. This integration allows institutional capital to move across chains securely and efficiently.

11.4.2.6 Calastone

Calastone is a global network that specializes in integrating blockchain technology into existing financial systems, facilitating the transition to digital asset management. As a consultancy and integrator, Calastone provides strategic advice and technical integration services to help traditional financial institutions embrace blockchain-based systems. A key component of their offering is the "Tokenised Distribution" division, which focuses on transforming traditional funds into digital tokens.

Overview of Calastone's Tokenization Services

Calastone's Tokenised Distribution service enables asset managers to tokenize any fund on the Calastone network without altering its structure, administration, or servicing. This service provides access to new distribution opportunities through blockchain networks, including Ethereum, Polygon, and Canton. By offering a frictionless bridge to blockchain, Calastone unlocks access to on-chain treasurers, stablecoin issuers, and digital-first platforms, eliminating operational headaches.

Key Features

1. **Seamless Integration:** Calastone allows asset managers to connect to digital venues using their existing systems, ensuring no disruption to current workflows. This seamless integration facilitates the adoption of blockchain technology without the need for significant infrastructure changes.
2. **Smart, On-Chain Automation:** The platform processes fund orders on-chain with dynamic token handling and automated settlement. This automation enhances efficiency and reduces the risk of errors, providing a streamlined process for managing tokenized assets.
3. **Access to New Investors:** Calastone's tokenization services enable asset managers to reach digital-native markets, including fintech treasurers and crypto-savvy retail investors. This expanded reach allows for greater distribution and access to a broader investor base.

Services for Financial Institutions

- **Strategic Advice:** Calastone provides strategic advice to financial institutions, helping them navigate the complexities of transitioning to blockchain-based systems. This includes guidance on regulatory compliance, technology integration, and operational efficiency.
- **Technical Integration:** The platform offers technical integration services, ensuring that financial institutions can seamlessly incorporate blockchain technology into their existing systems. This includes support for distributed ledger technology and cloud services.

11.4.2.7 OSL Digital Securities

Overview of OSL Digital Securities

OSL Digital Securities is a platform provider that offers trading solutions for digital assets, focusing on security and regulatory compliance. As the world's first insured and SFC-licensed digital asset platform, OSL provides a comprehensive suite of services, including brokerage, exchange, custody, and SaaS solutions, tailored for institutional clients and professional investors.

OSL is recognized for its robust infrastructure and commitment to regulatory compliance, setting industry benchmarks in the digital asset space. The platform is designed to facilitate seamless and secure trading operations across global markets, leveraging advanced technology to meet the needs of institutional investors.

Key Features

1. **Regulated Trading Platform**: OSL holds an SFC Type 1 (dealing in securities) and AMLO license, making it a fully regulated virtual asset service provider in Hong Kong. This regulatory approval provides a level of trust and security crucial for institutional investors.
2. **Comprehensive Brokerage Services**: OSL offers a full range of brokerage solutions, including voice-based, electronic, and API services. Clients can access institutional-sized liquidity with tight spreads and execute trades on a principal basis, ensuring efficient and reliable trading experiences.
3. **Secure Custody Solutions**: OSL provides secure custody services for digital assets, ensuring that institutional investors can safely store and manage their holdings. The platform employs military-grade security measures and insurance for assets in cold storage, adhering to regulatory requirements.

Tokenization Services

OSL Digital Securities is actively involved in tokenization initiatives, offering services that enhance the digital asset ecosystem. Examples include:

- **Infrastructure for Tokenized Assets**: OSL's platform supports the trading of tokenized assets, providing a secure and compliant environment for managing digital securities. This infrastructure facilitates the integration of blockchain technology into traditional financial systems.

11.4.2.8 Spiko

Overview of Spiko

Spiko is a fintech platform specializing in the tokenization of financial instruments, particularly money market funds within the European Union. The platform is designed to offer seamless access to risk-free rates in euros and dollars, targeting both businesses and individuals. Spiko aims to lead in the tokenization of financial instruments, providing financial products with fully tokenized shares.

Founded in 2023, Spiko focuses on transforming traditional financial instruments into digital tokens, allowing users to earn daily interest on their cash holdings. The platform provides a frictionless experience for accessing money market funds, ensuring liquidity and flexibility without the constraints of traditional term deposits. Spiko's products are backed by Treasury Bills issued by stable Eurozone countries and the United States, offering a secure and reliable investment option.

Key Features

1. **Tokenized Money Market Funds**: Spiko offers two primary products: the Spiko Euro fund and the Spiko Dollar fund. These funds provide access to risk-free rates through Eurozone Treasury Bills and U.S. T-Bills, respectively. Investors can earn daily interest on their cash without locking it away, ensuring full liquidity and accessibility.
2. **Seamless Access and Flexibility**: Spiko allows users to open an account in less than five minutes, with no notice, fees, or penalties for withdrawals. This ease of access ensures that users can manage their cash holdings efficiently, earning interest daily while maintaining liquidity.
3. **Security and Compliance**: Spiko's money market funds are regulated under EU law and approved by the French Financial Markets Authority (AMF). Client funds are securely held by CACEIS Bank, a subsidiary of the Crédit Agricole group, ensuring compliance with current legislation and providing peace of mind for investors.
4. **Diverse Clients**: Spiko caters to a wide range of users, including startups, SMEs, individuals, real estate companies, and freelancers. The platform offers tailored solutions for each segment, enabling users to optimize their cash management and earn returns on idle funds.

11.4.2.9 IZNES

Overview of IZNES

IZNES is a pioneering platform that integrates blockchain technology into asset management processes, focusing on enhancing operational efficiency and compliance. As a consultancy and integrator, IZNES provides strategic advice and technical integration services to help traditional financial institutions transition to blockchain-based systems. The platform is recognized as the first European marketplace operated on blockchain for investments in fund shares.

IZNES offers a comprehensive solution for the digitalization of fund distribution, leveraging blockchain technology to streamline operations and improve transparency. The platform facilitates the management of various securities operations, including dividend distribution, mergers, and nominal divisions, while ensuring compliance with regulatory requirements. By utilizing a private blockchain protocol, IZNES guarantees the confidentiality and security of user activities.

The shareholders of IZNES are:

- APICIL

- ARKEA Investment Services
- Candriam
- Euroclear
- Generali
- Groupama
- La Banque Postale
- La Financière de l'Echiquier
- OFI Invest
- Rothschild & Co Asset Management
- Societe Generale
- VATEL Capital

Key Features

1. **Tokenization of Fund Shares**: IZNES enables asset managers to tokenize fund shares, providing a seamless and efficient process for managing investments. This tokenization allows for real-time access to fund operations and positions, enhancing transparency and reducing operational risks.
2. **Regulatory Compliance**: The platform generates automatic fiscal reports in compliance with regulations, such as IFU, ensuring that all operations adhere to legal standards. This focus on compliance helps institutions navigate the complexities of regulatory requirements.
3. **Interoperability and Integration**: IZNES supports interoperability through REST APIs and exchange protocols, allowing seamless integration with various market participants. This capability facilitates the efficient exchange of information and enhances the overall functionality of the platform.
4. **Operational Support and Security**: IZNES provides dedicated operational support to assist users in navigating the platform. With a focus on resilience and cybersecurity, the platform offers one of the most secure commercial environments in the market.

Tokenization Initiatives

IZNES has been involved in several initiatives that highlight its commitment to advancing the digital asset ecosystem. Examples include:

- **Collaboration with Financial Institutions**: IZNES has partnered with major financial institutions like Generali and Carmignac to automate and secure their distribution operations via blockchain.
- **Experimentation with Central Bank Money**: In collaboration with the European Central Bank and Banque de France, IZNES conducted a groundbreaking experiment using Distributed Ledger Technology (DLT) for settlement in Central Bank Money. This initiative showcased the potential of digital cash tokens to revolutionize financial operations by enhancing security and reducing settlement times.

Services for Financial Institutions

- **Strategic Advice**: IZNES provides strategic advice to financial institutions, helping them transition to blockchain-based systems. This includes guidance on regulatory compliance, technology integration, and operational efficiency.
- **Technical Integration**: The platform offers technical integration services, ensuring that institutions can seamlessly incorporate blockchain technology into their existing systems. This includes support for distributed ledger technology and cloud services.

11.4.2.10 ADDX

Overview of ADDX

ADDX is a platform provider that specializes in offering trading solutions for tokenized assets, providing infrastructure for decentralized exchanges and interoperability solutions. As a regulated platform, ADDX is committed to making private markets accessible to a broader audience, including individual investors, by lowering investment minimums and offering a diverse range of alternative investment opportunities.

ADDX operates as a digital securities exchange, facilitating the trading of tokenized assets with a focus on security and regulatory compliance. The platform is licensed by the Monetary Authority of Singapore (MAS) as a Capital Markets Services licensee and Recognised Market Operator, ensuring that all operations adhere to stringent regulatory standards. ADDX aims to democratize access to private markets by offering investment opportunities that were traditionally available only to institutional players.

Key Features

1. **Tokenization Services**: ADDX specializes in the tokenization of financial instruments, transforming traditional assets into digital securities. This process allows for fractional ownership and increased liquidity, making it easier for investors to access private market opportunities.
2. **Diverse Investment Opportunities**: The platform offers a wide range of tokenized investment options, including private equity, hedge funds, private credit, and structured products. These alternatives provide investors with the potential for higher returns and portfolio diversification.
3. **Low Investment Minimums**: ADDX lowers the barriers to entry for private market investments by offering low minimum investment sizes, starting from as low as USD 5,000. This approach makes it possible for individual investors to participate in opportunities that were previously inaccessible.
4. **Secondary Trading Platform**: ADDX provides a secondary trading platform that offers liquidity for private market investments. Investors can exit selected holdings, partially or fully, and potentially access closed opportunities, enhancing the flexibility and accessibility of their investments.

Services for Investors and Issuers

- **For Investors**: ADDX offers a user-friendly platform for individual investors to access private market opportunities. The platform provides educational resources, insights, and webinars to help investors make informed decisions.
- **For Issuers**: ADDX enables issuers to reach a wider pool of investors and experience a more efficient and cost-effective way of raising capital. The platform's infrastructure supports the issuance and trading of tokenized securities, facilitating seamless capital raising processes.

11.4.2.11 Allfunds Blockchain

Overview of Allfunds Blockchain

Allfunds Blockchain is a specialized platform provider that focuses on offering trading platforms for tokenized assets and providing infrastructure for decentralized exchanges and interoperability solutions. By leveraging blockchain technology, Allfunds Blockchain aims to enhance the efficiency and security of fund distribution processes, catering to the needs of asset managers and distributors.

Allfunds Blockchain is designed to integrate blockchain technology into the fund distribution ecosystem, providing a secure and scalable platform for managing digital assets. The platform offers a range of solutions that streamline operations, reduce costs, and enhance data security. By utilizing blockchain, Allfunds Blockchain enables seamless integration and interoperability across various financial systems, facilitating efficient and transparent transactions.

Key Features

1. **Business Smart Contracts**: Allfunds Blockchain utilizes smart contracts to automate and optimize fund distribution operations. This technology serves as a strategic roadmap for implementing blockchain within the value chain, ensuring efficient and secure transactions.
2. **Cost-Effective Solutions**: The platform is designed to deliver cost savings by minimizing disruptions and reducing the complexity of traditional fund distribution processes. By integrating blockchain technology, Allfunds Blockchain offers a more streamlined and efficient approach to managing digital assets.
3. **Enhanced Security and Privacy**: Allfunds Blockchain provides special capabilities for data governance, ensuring privacy and anonymity within blockchain ecosystems. This focus on security helps protect sensitive information and maintain compliance with regulatory standards.
4. **Interoperability and Integration**: The platform supports interoperability through integrated tools, allowing seamless communication and data exchange between different market participants. This capability enhances the overall functionality and efficiency of the fund distribution process.

Tokenization Initiatives

Allfunds Blockchain has been involved in several tokenization initiatives, demonstrating its commitment to advancing the digital asset ecosystem. Examples include:

- **Tokenized Fund Launch**: Allfunds Blockchain played a pivotal role in the successful launch of Spain's first tokenized fund in 2022. This initiative highlights the platform's ability to integrate blockchain technology into traditional financial systems, providing a secure and efficient solution for managing tokenized assets.

Services for Asset Managers and Distributors

- **Strategic Advice**: Allfunds Blockchain offers strategic advice to asset managers and distributors, helping them navigate the complexities of transitioning to blockchain-based systems. This includes guidance on regulatory compliance, technology integration, and operational efficiency.
- **Technical Integration**: The platform provides technical integration services, ensuring that financial institutions can seamlessly incorporate blockchain technology into their existing systems. This includes support for distributed ledger technology and cloud services.

11.4.2.12 DigiFT

Overview of DigiFT

DigiFT is a pioneering platform that operates as a regulated exchange for tokenized real-world assets (RWA), bridging the gap between traditional finance (TradFi) and decentralized finance (DeFi). By leveraging blockchain technology, DigiFT offers a comprehensive suite of services designed to facilitate the trading of digital assets, providing infrastructure for decentralized exchanges and interoperability solutions.

DigiFT is built on the Ethereum blockchain and is recognized as the first regulated exchange for on-chain RWAs. The platform is designed to make innovative investment opportunities accessible to a broader audience by tokenizing assets such as bonds, equities, and other real-world investments. DigiFT's regulatory compliance is underscored by its successful graduation from the Monetary Authority of Singapore's FinTech Regulatory Sandbox, emphasizing its commitment to innovation within a secure framework.

Key Features

1. **Tokenization of Assets**: DigiFT specializes in the tokenization of both digital assets and real-world securities, including U.S. Treasury bills, high-yield bank bonds, and money market funds. This broad range of tokenized assets allows investors to access traditionally illiquid or hard-to-reach investments.
2. **Regulated Exchange**: As a regulated platform, DigiFT adheres to stringent regulatory standards, ensuring that all trading activities are conducted in a secure and compliant environment. This commitment to compliance fosters trust and ensures market integrity.
3. **Liquidity and Trading Mechanisms**: The platform enhances liquidity through its Automatic Market Maker (AMM), a smart contract-based trading system that enables efficient trading. Additionally, it supports Peer-to-Peer (P2P) and Over-the-Counter (OTC) trading methods for flexible and trustless transactions.
4. **Interoperability and Accessibility**: Some tokens, like the Short-Term Treasury Bill Token (STBT), are interoperable with decentralized exchanges, expanding liquidity options and enhancing market access. This interoperability allows for seamless integration and communication between different financial systems.

Tokenization Initiatives

DigiFT has been involved in several tokenization initiatives, showcasing its role in advancing the digital asset ecosystem. Examples include:

- **Diverse Asset Offerings**: DigiFT offers a wide range of tokenized assets, including U.S. Treasury tokens, bank bonds, money market funds, and the first regulated staked ETH product. These assets are supported by advanced liquidity mechanisms, such as an AMM for efficient trading.
  - **Partnerships with Financial Institutions**: DigiFT collaborates with leading asset managers like UBS Asset Management and Invesco, providing on-chain tokenization and distribution services for institutional RWAs.

Services for Investors and Issuers

- **For Investors**: DigiFT provides a user-friendly platform for accessing a diverse range of tokenized assets. Investors can easily subscribe to or redeem tokens using either USD or USDC, with transparent fees displayed upfront.
- **For Issuers**: The platform enables issuers to tokenize their assets and reach a broader pool of investors. This process facilitates efficient capital raising and enhances the liquidity of traditionally illiquid assets.

11.4.2.13 FundsDLT

Overview of FundsDLT

FundsDLT is a platform provider that offers a trading infrastructure specifically designed for tokenized assets, with a focus on fund distribution. The platform aims to streamline the issuance, trading, and settlement of digital securities, making the process more efficient, transparent, and accessible for market participants.

FundsDLT operates as a blockchain-based platform that facilitates the digitization of investment funds and other financial instruments. Its core proposition is to provide a secure, scalable, and interoperable environment where asset managers, distributors, and investors can interact seamlessly. The platform leverages distributed ledger technology (DLT) to automate and digitize key processes such as subscription, redemption, and secondary trading, reducing operational costs and settlement times.

FundsDLT is registered and operates primarily in Luxembourg, a jurisdiction known for its progressive regulatory environment for fund management and digital securities. Luxembourg's well-established legal framework for investment funds and its support for blockchain innovation make it an ideal base for FundsDLT's operations. The platform's strategic location allows it to serve a broad European market, with plans and capabilities to extend its services across other European countries and beyond. Its involvement in cross-border projects and collaborations with industry consortia suggest an ambition to facilitate global interoperability, especially in regions with supportive regulatory environments like Switzerland, the UK, and Singapore.

Key Features

Tokenization of Funds: FundsDLT enables the tokenization of traditional funds, allowing shares to be issued as digital tokens. This process enhances liquidity, as tokens can be traded on secondary markets with greater ease and speed compared to traditional fund units.

1. **Trading Platform**: The platform supports both primary issuance and secondary trading of tokenized funds. It provides a transparent order book and settlement mechanism, ensuring real-time updates and reducing settlement risks.

2. **Interoperability**: FundsDLT emphasizes interoperability across different blockchain networks and legacy systems. This allows for cross-border transactions and integration with existing financial infrastructure, broadening access to global investors.
3. **Regulatory Compliance**: The platform is designed to meet regulatory standards, with features such as investor onboarding, KYC/AML procedures, and audit trails embedded into the blockchain infrastructure. This ensures that tokenized fund transactions are compliant with relevant regulations.
4. **Automation and Efficiency**: Smart contracts automate key processes like subscription, redemption, and dividend distribution, reducing manual intervention and operational costs. This automation also enhances transparency and reduces settlement times from days to hours.

Notable Initiatives and Projects

FundsDLT has been involved in several notable projects demonstrating its capabilities in tokenized fund distribution.

- In 2021, it collaborated with Renta 4 Banco in Spain to launch the country's first tokenized fund within a regulatory sandbox, exploring faster issuance and settlement.
- In 2022, it partnered with Invesco to pilot cross-border fund distribution, enabling real-time subscriptions and redemptions across jurisdictions. The same year, AllianceBernstein used FundsDLT to tokenize a private equity fund, expanding access and liquidity for institutional investors.
- Most recently, in 2023, FundsDLT supported a tokenized money market fund in Luxembourg, aiming to facilitate pan-European, compliant trading and settlement of fund shares.

Benefits for Market Participants

- **Asset Managers**: Can issue and manage funds more efficiently, accessing new investor pools and reducing costs.
- **Distributors**: Gain access to a digital, transparent, and compliant platform for fund distribution.
- **Investors**: Benefit from increased liquidity, faster settlement, and broader access to diverse fund products globally.

11.4.2.14 Solowin

Overview of Solowin

Solowin is a Hong Kong-based platform specializing in the distribution and management of tokenized assets, with a focus on bridging traditional finance and blockchain technology. As a platform provider, Solowin offers a comprehensive infrastructure that supports the issuance, trading, and distribution of digital securities, including real-world assets (RWAs) and security token offerings (STOs). Its core mission is to facilitate the adoption of blockchain in asset management and capital markets, making these innovative solutions accessible to institutional and accredited investors.

Solowin operates as a Web3 distributor and agent, actively involved in tokenization projects such as money market funds (MMFs) and RWAs. The platform's role is to serve as an intermediary that connects asset managers, investors, and other market participants within a regulated environment. It leverages blockchain technology to enhance transparency, efficiency, and security in the distribution of tokenized assets, supporting the transition from traditional securities to digital tokens.

Key Features and Services

1. **Tokenized Fund Distribution**: Solowin supports the issuance and distribution of tokenized funds, including money market funds and other asset classes. This enables investors to access high-quality, liquid assets with lower minimum investments, while benefiting from blockchain's transparency and automation capabilities.
2. **Security Token Offerings (STOs)**: The platform facilitates compliant STOs, allowing issuers to raise capital through digital securities that are registered on blockchain networks. This process ensures regulatory adherence, simplifies issuance, and broadens investor access.
3. **Real-World Asset (RWA) Tokenization**: Solowin actively supports the tokenization of RWAs such as real estate, private equity, and other illiquid assets. This process enhances liquidity, enables fractional ownership, and reduces barriers to entry for a wider investor base.
4. **Blockchain Solutions**: The platform provides end-to-end blockchain infrastructure, including issuance, custody, trading, and settlement solutions. It supports interoperability with various blockchain networks, ensuring seamless cross-chain transactions and integration with existing financial systems.
5. **Partnerships and Ecosystem**: Solowin collaborates with major financial institutions, banks, and asset managers, such as Amundi, SCB (Siam Commercial Bank), and OSL Securities. These partnerships demonstrate its role as a facilitator of innovative tokenization projects, including the tokenized MMF initiative in Hong Kong.

Notable Initiatives

- **Tokenized Money Market Funds**: Solowin was involved in a feasibility study with OSL Securities to explore tokenized MMFs and liquidity solutions, marking a significant step toward digital asset integration in Asia.
- **Real-World Asset Projects**: The platform supports the tokenization of RWAs like real estate and private equity, aiming to unlock liquidity and democratize access to alternative investments.

11.5 Competition Landscape

11.5.1 Tokenized Fund List – Technical Features

Figure 47 Tokenized Fund List – Technical Features

Fund name	Fund manager	Asset Class	Domicile	Launch year	Min. Inv.	Availability	Tokenization Type	Blockchain Type	Technology Provider	Main Distributor
BlackRock USD Institutional Digital Liquidity Fund	BlackRock	Money Market	British Virgin Islands	2024	5 000 000 USD	U.S. Qualified Purchaser	Native	Public	Securitize	Securitize
Franklin OnChain U.S. Government Money Fund	Franklin Templeton	Money Market	US	2021	20 USD	All	Native	Public	Franklin Templeton	Franklin Templeton
Janus Henderson Anemoy Treasury Fund	Janus Henderson	Money Market	British Virgin Islands	2024	100 000 USDC	Professional Investor	Native	Public	Centrifuge	Anemoy
Apollo Diversified Credit Securitize Fund	Apollo GI	Private Credit	British Virgin Islands	2025	50 000 USD	Accredited Investor	Hybrid	Public	Securitize	Securitize
Hamilton Lane Equity Opportunities Securitize Fund V	Hamilton Lane	Private Equity	US	2023	20 000 USD	Accredited Investor	Hybrid	Public	Securitize	Securitize
Hamilton Lane Senior Credit Opportunities Securitize Fund	Hamilton Lane	Private Equity	US	2023	10 000 USD	Accredited Investor	Hybrid	Public	Securitize	Securitize
Hamilton Lane Secondary VI Securitize Fund	Hamilton Lane	Private Equity	British Virgin Islands	2022	20 000 USD	Accredited Investor	Hybrid	Public	Securitize	Securitize
Global Private Assets (GPA) Fund	Hamilton Lane	Private Equity	Luxembourg	2024	-	Institutional & Corporate investors (Sygnum clients only)	Hybrid	Private	Apex	Sygnum Bank
ChinaAMC HKD Digital Money Market Fund	ChinaAMC	Money Market	Hong Kong	2025	10 HKD	Retail	Native	Private	Standard Chartered Bank (Hong Kong)	OSL Digital Securities
Bosera USD Money Market ETF	Bosera AM	Money Market	Hong Kong	2025	1 USD	Retail & Institutional	Hybrid	Private	HBS (Hong Kong)	HBS (Hong Kong)
Bosera HKD Money Market ETF	Bosera AM	Money Market	Hong Kong	2025	1 HKD	Retail & Institutional	Hybrid	Private	HBS (Hong Kong)	HBS (Hong Kong)

UBS USD Money Market Investment Fund Token	UBS	Money Market	Singapore	2024	-	Accredited Investor	Native	Private	UBS Tokenize	DigiFT
Spiko EU T-Bills Money Market Fund	Twenty First Capital	Money Market	France	2024	1000 EUR	All	Native	Public	Spiko	Spiko
Spiko US T-Bills Money Market Fund	Twenty First Capital	Money Market	France	2024	1000 USD	All	Native	Public	Spiko	Spiko
abrdn Liquidity Fund (Lux) – US Dollar Fund	Aberdeen	Money Market	Luxembourg	2024	5000 EUR	Institutional Investors	Hybrid	Public	Archax	Archax
Delta Wellington Ultra Short Treasury On-Chain Fund Token	Wellington	Money Market	Singapore	2025	200 000 USD	Accredited & Institutional investors	Native	Private	Libeara / Fundbridge	Delta
BNP Paribas Funds Euro Money Market - T DLT share class	BNP Paribas	Money Market	France	2025	-	Internal project	Hybrid	Private	BNP Paribas Securities Services	Allfunds Blockchain
Ondo U.S. Dollar Yield	Ondo	Money market	US	2023	-	Non-U.S. Investor	Native	Public	Ondo	Ondo
Superstate Short Duration US Government Securities Fund	Superstate	Money market	US	2024	100 000 USD	U.S. Qualified Purchaser U.S. Accredited Investor	Native	Public	Superstate	Superstate
Ondo Short-Term US Government Bond Fund	Ondo	Money market	US	2023	100,000 USDC	U.S. Qualified Purchaser	Native	Public	Ondo	Ondo
Circle USYC	Circle	Money Market	US	2023	100,000 USDC	U.S. Qualified Purchaser Non-U.S. Investor	Native	Public	Circle	Circle
OpenEden TBILL Vault	OpenEden	Money Market	British Virgin Islands	2023	100,000 USDC	U.S. Accredited Investor Professional Investor	Native	Public	OpenEden Digital	OpenEden Digital
WisdomTree Government Money Market Digital Fund	Wisdom Tree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
Fidelity ILF USD Fund Class G Acc	Fidelity	Money Market	-	2024	-	All	Hybrid	Public	Sygnum Bank	Fidelity

OpenTrade Flexible Term USD Vault	OpenTrade	Money Market	Cayman Islands	2024	100 USDC	All	Native	Public	OpenTrade	OpenTrade
WisdomTree Floating Rate Treasury Fund - Dinari	WisdomTree	Money Market	US	2023	-	Non-U.S. Global Retail	Native	Public	Dinari	WisdomTree
Libre SAF VCC - USD I Money Market	Libre	Money Market	Singapore	2024	50 000 USD	Institutional Investor, Accredited Investor	Native	Public	Libre Capital	Libre
Backed IBTA $ Treasury Bond 0-1yr	Backed	Money Market	Switzerland	2023	5 000 USDC	Non-U.S. Investor	Native	Public	Backed Finance	Backed
VanEck Treasury Fund	VanEck	Money Market	British Virgin Islands	2025	100 000 USD	All	Native	Public	Securitize	VanEck
USTY U.S. Treasury Tokens	Yieldteq	Money Market	US	2023	20 000 USDC	Professional Investor	Native	Public	Securitize	USTY
Matrixdock Short-term Treasury Bill Token	Maxtrixdock	Money Market	Seychelles	2023	-	U.S. Accredited Investor	Native	Public	Matrixdock	Matrixdock
WisdomTree Floating Rate Treasury Digital Fund	WisdomTree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
VanEck Treasury Fund	VanEck	Money Market	British Virgin Islands	2025	100 000 USD	All	Native	Public	Securitize	VanEck
Backed IBTA $ Treasury Bond 1-3yr	Backed	Money Market	Switzerland	2023	5 000 USDC	Non-U.S. Investor	Native	Public	Backed Finance	Backed
WisdomTree Short-Term Treasury Digital Fund	WisdomTree	Money Market	US	2022	25 USD	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
Midas TBILL	BlackRock	Money Market	Germany	2023	-	Non-U.S. investor	Native	Public	Midas	Midas
WisdomTree 3-7 Year Treasury Digital Fund	WisdomTree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
WisdomTree TIPS Digital Fund	WisdomTree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
WisdomTree 7-10 Year Treasury Digital Fund	WisdomTree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree

WisdomTree Long Term Treasury Digital Fund	WisdomTree	Money Market	US	2023	-	U.S. Retail and Institutional Investor	Native	Public	WisdomTree	WisdomTree
ArCoin	ArcaLabs	Money Market	US	2021	1 000 USD	U.S. and Global Retail	Native	Public	Arca Labs	ArCoin
Backed ZPR1 $ 1-3 Month T-Bill	Backed	Money Market	Switzerland	2023	5 000 USDC	Non-U.S. Investor	Native	Public	Backed Finance	Backed
Guggenheim Treasury Services DCP	Guggenheim	Money Market	US	2024	-	All	Native	Public	AmpFi.Digital by Zeconomy	Guggenheim
DigiFT Money Market Fund Token	CSOP AM	Money Market	Singapore	2024	2 000 USDC	Non-U.S. Accredited Investor	Native	Public	DigiFT	DigiFT
OpenTrade Fixed Term U.S. Treasury Bill Vaults	OpenTrade	Money Market	Cayman Islands	2023	100 USDC	Non-U.S. Accredited Investor	Native	Public	OpenTrade	OpenTrade
Swarm iShares $ Treasury Bond 0-1yr UCITS ETF	Swarm	Money Market	Germany	2023	-	Non-U.S. Investor	Native	Public	Swarm	Swarm
Swarm iShares $ Treasury Bond 1-3yr UCITS ETF	Swarm	Money Market	Germany	2023	-	Non-U.S. Investor	Native	Public	Swarm	Swarm
Adapt3r Short-Term U.S. Treasury Bill Fund	Adapt3r	Money Market	British Virgin Islands	2023	100 000	Professional Investor	Native	Public	TrueFi	Adapt3r
Backed ERNX € Ultrashort Bond	Backed	Money Market	Switzerland	2023	5 000 EURC	All	Native	Public	Backed Finance	Backed
Backed GOVIES 0-6 Months Euro Investment Grade	Backed	Money Market	Switzerland	2023	5 000 EURC	All	Native	Public	Backed Finance	Backed
OpenTrade Fixed Term E.U. Bonds Vault	OpenTrade	Money Market	Cayman Islands	2024	100 EURC	All	Native	Public	OpenTrade	OpenTrade
OpenTrade Rates+ Vault	OpenTrade	Money Market	Cayman Islands	2024	-	All	Native	Public	OpenTrade	OpenTrade
Etherfuse CETES	Etherfuse		Mexico	2024	-	Non-U.S. Investor	Native	Public	Etherfuse	Etherfuse
Etherfuse TESOURO	Etherfuse		Mexico	2024	-	Non-U.S. Investor	Native	Public	Etherfuse	Etherfuse
Backed HIGH € High Yield Corp	Backed		Switzerland	2023	5 000 EURC	All	Native	Public	Backed Finance	Backed Finance

Etherfuse GILTS	Etherfuse		Mexico	2024	-	Non-U.S. Investor	Native	Public	Etherfuse	Etherfuse
Etherfuse EUROB	Etherfuse		Mexico	2024	-	Non-U.S. Investor	Native	Public	Etherfuse	Etherfuse
WisdomTree Short-Duration Income Digital Fund	WisdomTr ee		US	2023	25 USD	All	Native	Public	WisdomTr ee	WisdomTree
Blockchain Capital III Digital Liquid Venture Fund	Blockchain Capital	Venture Capital Crypto	Singapore	2017	20 000 USD	All	Native	Public	Securitize	Securitize
Superstate Crypto Carry Fund	Superstate	Money Market	US	2024	100 000 USDC	U.S. Qualified Purchaser	Native	Public	Superstate	Superstate
SPiCE VC	SPiCE VC	Venture Capital Crypto	Singapore	2017	-	All	Native	Public	Securitize	Securitize
Cosimo X	Cosimo Ventures	Venture Capital Crypto	Cayman Islands	2021	-	All	Native	Public	Securitize	Securitize
Republic NOTE	Republic	Venture Capital	US	-	-	All	Native	Public	Republic	Republic
Re Member Fund LP	Re Member	Reinsur ance	Cayman Islands	2024	-	All	Native	Public	Securitize	Securitize
Science Blockchain	Science Blockchain	Venture Capital Crypto	Singapore	2017	-	All	Native	Public	Securitize	Securitize
Libre SAF VCC – BH Master Fund Access	Libre	Hedge Fund	Singapore	2024	10 000 USD	Institutional Investor Accredited Investor	Native	Public	Libre Capital	Libre Capital
Libre SAF VCC - Hamilton Lane SCOPE Private Credit Access	Libre	Private Asset	Singapore	2024	10 000 USD	Institutional Investor Accredited Investor	Native	Public	Libre Capital	Libre Capital
Protos	Protos	Hedge Fund	Singapore	2017	-	All	Native	Public	Securitize	Securitize
KKR Health Care Strategic Growth II Securitize Fund	Securitize Capital	Healthca re Private Equity	British Virgin Islands	2022	-	All	Hybrid	Public	Securitize	Securitize
ParaFi Venture II Securitize Fund	Securitize Capital	Venture Capital Crypto	-	2024	-	All	Hybrid	Public	Securitize	Securitize
Libre SAF VCC - Access Private Credit Feeder A	Libre	-	Singapore	2024	-	All	Hybrid	Public	Libre Capital	Libre Capital

22X Fund	22X Fund Management	Venture Capital	Cayman Islands	2018	-	All	Native	Public	Securitize	Securitize

11.5.2 Tokenized Fund List – AUM

Figure 48 Tokenized Fund List – AUM		
Fund Name	**Asset Class**	**AuM June 2025**
BlackRock USD Institutional Digital Liquidity Fund	Money Market	$ 2 908 780 206,00
Franklin OnChain U.S. Government Money Fund	Money Market	$ 743 419 004,00
Ondo Short-Term US Government Bond Fund	Money Market	$ 710 549 162,00
Superstate Short Duration US Gov. Securities Fund	Money Market	$ 690 584 183,00
Ondo U.S. Dollar Yield	Money Market	$ 683 481 537,00
Circle USYC	Money Market	$ 462 496 775,00
Janus Henderson Anemoy Treasury Fund	Money Market	$ 409 170 130,00
WisdomTree Government Money Market Digital Fund	Money Market	$ 315 309 666,00
Spiko EU T-Bills Money Market Fund	Money Market	$ 199 606 411,00
OpenEden TBILL Vault	Money Market	$ 185 215 734,00
Superstate Crypto Carry Fund	Money Market	$ 155 956 504,00
Blockchain Capital III Digital Liquid Venture Fund	Private Equity	$ 148 392 778,00
Spiko US T-Bills Money Market Fund	Money Market	$ 88 825 609,00
Apollo Diversified Credit Securitize Fund	Private Equity	$ 71 396 835,00
abrdn Liquidity Fund (Lux) – US Dollar Fund	Money Market	$ 44 905 635,00
Fidelity ILF USD Fund Class G Acc	Money Market	$ 41 850 572,00
SPiCE VC	Private Equity	$ 37 665 282,00
OpenTrade Flexible Term USD Vault	Money Market	$ 30 516 353,00
WisdomTree Floating Rate Treasury Fund - Dinari	Money Market	$ 25 830 876,00
Libre SAF VCC - USD I Money Market	Money Market	$ 21 863 878,00
Cosimo X	Private Equity	$ 21 843 738,00
Republic NOTE	Private Equity	$ 16 353 591,00
Re Member Fund LP	Private Credit	$ 12 945 000,00
Science Blockchain	Private Equity	$ 11 882 818,00
Backed ERNX € Ultrashort Bond	Money Market	$ 11 320 000,00

abrdn Liquidity Fund (Lux) - Euro Fund	Money Market	$	11 162 470,00
Backed GOVIES 0-6 Months Euro Investment Grade	Money Market	$	9 415 492,00
Backed IBTA $ Treasury Bond 0-1yr	Money Market	$	9 395 028,00
Private Equity	Private Equity	$	8 732 759,00
VanEck Treasury Fund	Money Market	$	7 500 000,00
Libre SAF VCC - BH Master Fund Access	Private Equity	$	7 265 592,00
Libre SAF VCC - Hamilton Lane SCOPE Private Credit Access	Private Equity	$	7 015 871,00
Protos	Private Equity	$	6 479 310,00
Hamilton Lane Secondary VI Securitize Fund	Private Equity	$	6 430 000,00
Hamilton Lane Equity Opportunities Securitize Fund V	Private Equity	$	5 521 250,00
OpenTrade Fixed Term E.U. Bonds VaultOpenTrade (Perimeter Protocol)	Money Market	$	5 217 426,00
USTY U.S. Treasury Tokens	Money Market	$	4 660 000,00
KKR Health Care Strategic Growth II Securitize FundSecuritize	Private Equity	$	4 130 000,00
OpenTrade Rates+ VaultOpenTrade (Perimeter Protocol)	Fixed Income	$	3 993 283,00
Matrixdock Short-term Treasury Bill Token	Money Market	$	3 528 840,00
ParaFi Venture II Securitize FundSecuritize	Private Equity	$	2 265 000,00
WisdomTree Floating Rate Treasury Digital Fund	Money Market	$	1 840 556,00
Libre SAF VCC - Access Private Credit Feeder ALibre Capital	Private Equity	$	1 500 000,00
Etherfuse CETESEtherfuse	Fixed Income	$	1 344 594,00
VanEck Treasury Fund	Money Market	$	1 250 760,00
Backed IBTA $ Treasury Bond 1-3yr	Money Market	$	1 219 696,00
WisdomTree Short-Term Treasury Digital Fund	Money Market	$	1 009 892,00
Midas TBILL	Money Market	$	998 726,00
WisdomTree 3-7 Year Treasury Digital Fund	Money Market	$	969 219,00
WisdomTree 7-10 Year Treasury Digital Fund	Money Market	$	932 724,00
WisdomTree Long Term Treasury Digital Fund	Money Market	$	846 009,00
ArCoin	Money Market	$	430 082,00
22X FundSecuritize	Private Equity	$	351 834,00
Backed ZPR1 $ 1-3 Month T-Bill	Money Market	$	275 096,00
Etherfuse TESOUROEtherfuse	Fixed Income	$	255 194,00

Backed HIGH € High Yield Corp BondBacked Finance	Fixed Income	$	178 452,00
WisdomTree TIPS Digital Fund	Money Market	$	96 374,00
DigiFT Money Market Fund Token	Money Market	$	69 731,00
OpenTrade Fixed Term U.S. Treasury Bill Vaults	Money Market	$	59 404,00
Swarm iShares $ Treasury Bond 0-1yr UCITS ETF	Money Market	$	21 861,00
Swarm iShares $ Treasury Bond 1-3yr UCITS ETF	Money Market	$	17 136,00
Guggenheim Treasury Services DCP	Money Market	$	11 526,00
Etherfuse GILTS	Fixed Income	$	3 691,00
Etherfuse EUROB	Fixed Income	$	1 411,00
Adapt3r Short-Term U.S. Treasury Bill Fund	Money Market	$	1,00
BlackRock ICS US Treasury Fund	Money Market	$	-
Cash Management Pool (USDC)	Money Market	$	-
Cash Management Pool (USDC-SPL)	Money Market	$	-
Cash Management Pool (USDT)	Money Market	$	-
Fidelity ILF - The United States Dollar Fund	Money Market	$	-
Fortunafi Tokenized Short-Term U.S. Bonds (International)	Money Market	$	-
Fortunafi Tokenized Short-Term U.S. Bonds (U.S.)	Money Market	$	-
LGIM US Dollar Liquidity Fund	Money Market	$	-
State Street USD Liquidity LVNAV Fund	Money Market	$	-
Backed ERNA $ Ultrashort Bond	Money Market	$	-
WisdomTree Short-Duration Income Digital Fund	Money Market	$	-

11.5.3 Asset Manager Initiatives : Top 50 List

Figure 49 Asset Manager Initiatives : Top 50 List

Rank	Asset Manager	Fund Tokenisation Initiative	Fund Tokenisation Project
1	BlackRock	Y	BlackRock USD Institutional Digital Liquidity Fund (BUIDL)
2	Vanguard	N	
3	Fidelity Investments	Y	Fidelity Institutional Liquidity Fund (tokenized share class)
4	State Street Global Adv.	Y	Internal project on MM Tokenized fund (no launch announced yet)

Amundi Business Intelligence
business.intelligence@amundi.com

5	J.P. Morgan AM	Y	Kinexys by JPMorgan (Service Prodider for fund tokenization) / No fund launched so far
6	Goldman Sachs AM	Y	Internal projects (limited information)
7	Capital Group	N	
8	Amundi		No public information released
9	BNY Mellon IM	Y	Service Provider
10	PIMCO	N	
11	UBS AM	Y	UBS USD Money Market Investment Fund Token (UMINT)
12	Invesco	Y	Invesco US Senior Loan Strategy tokenized Fund (with DigiFT in Singapore)
13	Legal & General IM	Y	Internal project to tokenize L&G IM Liquidity funds
14	Morgan Stanley IM	Y	
15	Franklin Templeton	Y	Franklin OnChain U.S. Government Money Fund (FOBXX)
16	PGIM	N	
17	T. Rowe Price	Y	Involved in Project Guardian (Singapore)
18	Geode Capital Mgt	N	
19	Natixis IM	Y	Internal projects (limited information)
20	Wellington Mgt	Y	Delta Wellington Ultra Short Treasury On-Chain Fund Token
21	Nuveen	N	
22	Northern Trust AM	Y	Involved in Project Ensemble (HK)
23	Charles Schwab IM	N	
24	Blackstone	N	
25	DWS	Y	Involved in Project Guardian (Singapore)
26	AXA IM	Y	Subscription via Blockchain (Generali into AXA Court Terme, processed by IZNES)
27	Sumitomo Mitsui T. AM	Y	Tokenized joint money trust project (with Sony Bank and Securitize)
28	PGIM Fixed Income	N	
29	Insight Investment	N	
30	Schroder IM	Y	Tokenization pilot project on Insurance-Linked Securities / Member of Project Guardian (Singapore), fund distribution
31	Federated Hermes	N	
32	China Life AM	Y	via subsidiary ChinaAMC (Tokenized Retail Money Market Fund)
33	Ping An AM	N	
34	Brookfield AM	N	

35	AllianceBernstein	Y	Partnership with Allfunds Blockchain
36	BNP Paribas AM	Y	MM tokenized share class (BNP Paribas Euro Money Market fund)
37	HSBC AM	Y	Member of both Project Guardian and Ensemble
38	New York Life Invt.	N	
39	Dimensional	N	
40	Affiliated Managers	N	
41	Manulife IM	N	
42	Apollo Global Mgt	Y	Tokenized Private Credit Fund (ACRED fund)
43	Columbia Threadneedle Inv.	N	
44	APG AM	N	
45	MUFG AM	Y	Real Estate Tokenisation project
46	Macquarie AM	N	
47	MetLife IM	N	
48	MFS IM	N	
49	Allianz GI	N	
50	Generali AM	N	

Source: Company websites, annual reports & press releases, IPE

11.5.4 United States: Tokenized Funds Profiles

11.5.4.1 Money Markets

11.5.4.1.1 BlackRock USD Institutional Digital Liquidity Fund ("BUIDL")

On March 20, 2024, BlackRock, the world's largest asset management firm, made a significant leap into the digital finance space by launching its first tokenized fund, the BlackRock USD Institutional Digital Liquidity Fund, commonly referred to as "BUIDL." This innovative fund represents a pivotal moment in the intersection of traditional finance and blockchain technology, offering a glimpse into the future of asset management.

Overview and Structure

BUIDL is a tokenized money market fund that primarily invests in short-term U.S. Treasuries. The fund was initially launched on the Ethereum blockchain in March 2024, marking BlackRock's entry into the realm of digital assets. The tokenization of this fund allows for enhanced transparency, reduced transaction costs, and improved accessibility, making it an attractive option for institutional investors seeking efficient cash management solutions.

Fund size : $2,878,764,025 (25/06/2025)

Subscription via stablecoins : Yes

Expansion and Accessibility

Following its initial success on Ethereum, BlackRock expanded BUIDL's accessibility to additional blockchain networks, including Aptos, Arbitrum, Avalanche, Optimism's OP Mainnet, Solana and Polygon. This expansion underscores BlackRock's commitment to leveraging blockchain technology to broaden the reach and utility of its financial products. By operating on multiple blockchains, BUIDL offers investors increased flexibility and the ability to engage with the fund across various decentralized platforms.

Investment Features and Benefits

BUIDL is designed to provide qualified investors with access to U.S. dollar yields on-chain, featuring flexible custody options, daily dividend payouts, and near real-time 24/7/365 peer-to-peer transfers. These features make BUIDL an appealing choice for institutions and protocol treasuries looking to park their on-chain cash to earn a yield or use it as collateral for trading. Additionally, decentralized finance protocols, such as Ondo Finance, have built products on top of BUIDL, further integrating it into the DeFi ecosystem.

Market Position and Fees

As of May 18th, 2025, BUIDL has amassed over $2.8 billion in assets under management, making it the largest product in the $6.98 billion tokenized U.S. Treasury market. The fund's management fees vary depending on the blockchain network, with a 50 basis point fee on Ethereum, Arbitrum, and Optimism, and a reduced 20 basis point fee on Aptos, Avalanche, and Polygon. This tiered fee structure reflects BlackRock's strategic approach to incentivizing participation across different blockchain ecosystems. 72 holders are invested into the fund at this date.

11.5.4.1.2 Franklin OnChain U.S. Government Money Fund (“BENJI” Fund)

The Franklin OnChain U.S. Government Money Fund, also known as the BENJI Fund, represents a pioneering effort by Franklin Templeton, a $1.4 trillion investment giant, to integrate blockchain technology into traditional finance. Launched on April 6, 2021, the BENJI Fund was the first tokenized fund.

Overview and Structure

The BENJI Fund is a 40-act mutual fund that invests in U.S. government securities, cash, and repurchase agreements. Unlike traditional mutual funds, the BENJI Fund is tokenized, allowing investors to purchase shares in the form of Benji tokens. Each Benji token represents one share of the fund, providing investors with a digital asset security that offers transparency and efficiency through blockchain technology.

Fund size : $743,416,315 (25/06/2025)

Subscription via stablecoins : Yes

Expansion and Accessibility

Initially launched on the Stellar blockchain, the BENJI Fund has expanded its reach by integrating with Ethereum, Arbitrum, Avalanche, Base, Polygon, Aptos and Solana. This strategic move allows Franklin Templeton to leverage the benefits of public blockchains, such as cost efficiency and innovation, while maintaining regulatory compliance. The fund's blockchain diversification strategy aims to create a wide interoperable space, enabling access to a broader range of potential investors.

Investment Features and Benefits

The BENJI Fund offers investors a low-risk option by focusing on short-term, highly liquid investments. The tokenized nature of the fund allows for automated, frequent payouts in Benji tokens, enhancing liquidity and providing a stable income stream. This feature is particularly appealing to both Web3 natives and traditional investors who value transparency and the potential for strong yields.

Market Position and Fees

As of May 18th, 2025, the BENJI Fund has grown to $752 million in assets under management, reflecting significant traction in the market. The fund is the second biggest tokenized US Treasuries fund behind BlackRock's BUIDL. The management fees are 0.15% and 566 holders are invested into the fund at this date.

Expansion in Europe & Asia

The Franklin OnChain U.S. Government Money Fund, or BENJI Fund, has recently expanded its presence beyond the United States, marking significant milestones in Europe and Asia. In 2024, Franklin Templeton launched a UCITS version of the BENJI Fund in Europe, integrating the tokenized fund within the European regulatory framework and offering European investors access to this innovative financial product. Additionally, the fund's expansion into Asia is highlighted by its introduction in Singapore under the Variable Capital Company (VCC) format. This strategic move into Singapore further demonstrates Franklin Templeton's commitment to leveraging tokenization to enhance global accessibility and liquidity, providing investors across multiple regions with a modernized approach to government securities investment.

11.5.4.1.3 Janus Henderson Anemoy Treasury Fund (JTRSY Fund)

The Janus Henderson Anemoy Treasury Fund, known as the JTRSY Fund, is a tokenized professional fund domiciled in the British Virgin Islands (BVI). Licensed by the BVI Financial Services Commission, this fund is open to non-US professional investors and represents a significant step in Janus Henderson's strategic move into the realm of tokenization, following the footsteps of industry leaders like BlackRock and Fidelity International.

Overview and Structure

The JTRSY Fund is designed to invest solely in short-term U.S. Treasury Bills (T-bills) with maturities ranging from 0 to 3 months. This focus on short-term T-bills aims to minimize price and duration risks while offering daily liquidity and money market returns. The fund's structure is fully on-chain, providing direct access to U.S. Treasury yields with enhanced transparency and reduced costs due to fewer intermediaries.

Fund size : $409,025,654 (25/06/2025)

Subscription via stablecoins : Yes

Blockchain Integration and Expansion

The fund operates on a multichain architecture, with tokens issued on Ethereum, Base and Celo. This setup allows for operational resilience and broad accessibility, enabling investors to manage their holdings and returns in near real-time through the Centrifuge platform. The integration of blockchain technology facilitates seamless transactions and offers legal claims on the assets under management.

Investment Features and Benefits

The JTRSY Fund offers daily liquidity and focuses on maximizing interest rates while minimizing risks associated with price and duration. Investors can redeem their shares in-kind, benefiting from reduced costs due to the streamlined process. The fund's tokenized structure provides investor protection and transparency, allowing for real-time monitoring of fund composition and performance.

Market Position and Growth

The fund has been assigned an AA+f / S1+ fund credit quality rating from S&P Global Ratings on March 12, 2025, the highest rating given to any tokenized fund. This rating underscores the fund's quality and sophistication, establishing it as a benchmark in the tokenized fund market. As of May 18th, 2025, the JTRSY Fund has grown to $409 million in assets under management. The fund is one of the largest US Treasuries tokenized funds. The management fees are 0.15% and 7 holders are invested into the fund at this date.

11.5.4.1.4 Delta Wellington Ultra Short Treasury On-Chain Fund Token (ULTRA)

The Delta Wellington Ultra Short Treasury On-Chain Fund Token (ULTRA) is an innovative financial product that offers accredited and institutional investors the opportunity to invest in tokenized units of a fund primarily composed of U.S. Treasury securities. Managed by FundBridge Capital with Wellington Management as the sub-manager, this fund aims to preserve capital and maintain liquidity while providing returns that exceed the ICE BofA 3 Month Treasury Bill Index. By leveraging blockchain technology, specifically the Ethereum Mainnet, the fund enhances transparency, auditability, and operational efficiency in investment processes, marking a significant advancement in the tokenization of real-world assets.

- Technical Profile

  - **Type**: The fund is a native tokenized fund based on Ethereum blockchain, utilizing Ethereum, with plans to expand to Arbitrum, Avalanche, and Solana.
  - **Fund size** : $ 21,453,519 (25/06/2025)
  - **Subscription via stablecoins** : Yes

- Commercial and Administrative Profile

  - **Fees:** The fund charges a management fee of 0.45%
  - **Fund Service Providers:** FundBridge Capital serves as the fund manager, with Wellington Management as the sub-advisor. Standard Chartered Bank acts as the broker and custodian, while Vistra Alternative Investments is the administrator.

- Investment Strategy Profile

  - **Asset Portfolio:** The investment objective of the Delta Wellington Fund is to preserve capital and maintain liquidity, while providing long-term total return in excess of the ICE BofA 3 Month Treasury Bill Index. The fund is managed on a total return basis by investing in securities issued by the Government of the United States.

- Distribution Profile

  - **Subscription Process:** The Delta Wellington Ultra Short Treasury On-Chain Fund Token is domiciled in Singapore, reflecting the registration of the Delta platform in this jurisdiction. This platform, backed by SC Ventures of Standard Chartered Group, allows accredited and institutional investors to subscribe using USDC or fiat currency, with a minimum investment of $200,000. It supports daily subscriptions and redemptions, facilitating seamless management of tokenized fund units. By leveraging blockchain technology, the platform enhances transparency, security, and operational efficiency in handling U.S. Treasury investments.

- Sales Promise

  - **Advantages of Tokenized Offering**:. The Delta Wellington Ultra Short Treasury On-Chain Fund Token leverages the Delta platform to provide secure access to U.S. Treasury securities. Offering transactions in USDC or fiat, the platform supports daily subscriptions and redemptions, enhancing liquidity and investment control. By recording transactions on blockchain, it ensures transparency and security, while reducing operational costs and speeding up settlements, making it a highly efficient investment vehicle.

11.5.4.1.5 Ondo Short-Term US Government Bond Fund (OUSG)

The Ondo Short-Term US Government Bond Fund, commonly referred to as the OUSG Fund, is a tokenized investment vehicle designed to provide exposure to U.S. Treasury securities. Managed by Ondo Finance, this fund represents a significant innovation in the tokenization of traditional financial assets, offering a secure and efficient way for qualified investors to access short-term U.S. government bonds.

Overview and Structure

The OUSG Fund invests in short-term U.S. Treasury securities, making it a low-risk option for investors seeking stability and predictable returns. The fund is domiciled in the United States and is exclusively available to U.S. Qualified Purchasers. It was launched on January 26, 2023, and has since grown to manage a total value of $710,549,162, with 74 holders as of 16 June 2025.

The Ondo Short-Term US Government Bond Fund (OUSG Fund) operates as a feeder fund, allocating the majority of its assets to high-quality tokenized funds such as BlackRock's USD Institutional Digital Liquidity Fund (BUIDL), WisdomTree Government Money Market Digital Fund (WTGXX), Fidelity Treasury Digital Fund (FYHXX), and Franklin OnChain U.S. Government Money Fund (BENJI). This diversified portfolio is further complemented by holdings in USDC, cash, and bank deposits, ensuring liquidity and stability. As of June 13, 2025, the fund's investments include 20.01% in BUIDL, 28.29% in WTGXX, 27.51% in FYHXX, and 14.10% in BENJI, alongside smaller allocations to cash equivalents and bank deposits, making it a robust and reliable option for qualified investors.

Fund size : $709,768,227 (25/06/2025)

Subscription via stablecoins : Yes

Blockchain Integration and Expansion

The OUSG Fund operates on the Ondo protocol, leveraging blockchain technology to enhance transparency, efficiency, and accessibility. Investors can subscribe to the fund using USDC (USD Coin), a stablecoin pegged to the U.S. dollar, with a minimum investment requirement of 100,000 USDC. The fund does not charge subscription or redemption fees, and its digital structure allows for seamless transactions and efficient fund management. The available networks are Ethereum, Polygon, Solana and Ripple.

Investment Features and Benefits

The OUSG Fund is designed to accumulate income, making it an attractive option for investors looking to reinvest earnings. Its tokenized structure provides enhanced liquidity and accessibility, allowing investors to manage their holdings in a secure and efficient manner.

Market Position and Fees

Since its inception, the OUSG Fund has attracted significant interest, reflecting the growing demand for tokenized financial products. Its focus on short-term U.S. Treasury securities positions it as a stable and reliable investment option in the evolving landscape of digital finance. It has a total value of $710,549,162, with 74 holders as of 16 June 2025. Management fees are 0.15%.

11.5.4.1.6 Superstate Short Duration US Government Securities Fund (USTB)

The Superstate Short Duration US Government Securities Fund, commonly referred to as the USTB Fund, is a tokenized investment vehicle designed to provide U.S. Accredited Investors and Qualified Purchasers with access to short-duration U.S. Treasury Bills and Agency securities. Managed by Superstate, this fund combines the stability of traditional government securities with the efficiency and transparency of blockchain technology.

Overview and Structure

The USTB Fund invests in short-duration U.S. Treasury Bills and Agency securities, targeting returns aligned with the federal funds rate. Its primary objective is to provide current income while maintaining liquidity and stability of principal. The fund was launched on January 3, 2024, and is structured as a series of a Delaware Statutory Trust. Ownership in the fund is represented by USTB tokens, which can be held on multiple blockchain networks or as book-entry shares.

Fund size : $711,933,035 (25/06/2025)

Subscription via stablecoins : Yes

Blockchain Integration and Expansion

The USTB Fund operates on Ethereum, Plume and Off-Chain networks, enabling investors to mint or redeem shares through on-chain transactions. This blockchain integration unlocks new workflows for DeFi protocols, stablecoin issuers, and automated investment strategies. Subscriptions and redemptions are facilitated in both USD and USDC, with daily liquidity available. The fund's continuous NAV (Net Asset Value) per share allows for immediate interest accrual upon fund receipt, eliminating settlement delays.

Investment Features and Benefits

The fund's tokenized structure provides enhanced transparency, allowing investors to view holdings and returns in real-time. Additionally, the fund's design supports seamless integration with DeFi ecosystems, making it a versatile option for both traditional and crypto-native investors.

Market Position and Fees

As of June 16 2025, the USTB Fund manages $688,331,472 in assets with 68 holders. Its focus on short-duration U.S. government securities positions it as a stable and reliable investment option in the evolving landscape of tokenized finance. The USTB Fund offers a low-cost investment option with a management fee of 0.15% and no performance, subscription, or redemption fees. Organizational expenses, including NAV consulting and custodial services, are amortized.

11.5.4.2 Private Markets

11.5.4.2.1 Apollo Diversified Credit Securitize Fund (ACRED Fund)

The Apollo Diversified Credit Securitize Fund, known as the ACRED Fund, represents a significant advancement in the tokenization of credit assets. Managed by Apollo, a leader in global credit strategies, this fund is a tokenized vehicle that provides investors with access to a diversified portfolio of credit investments through Securitize's innovative platform.

Overview and Structure

The ACRED Fund is structured as a tokenized fund that invests substantially all of its assets in the Apollo Diversified Credit Fund (CDRIX). This underlying fund employs a "multi-asset" investment strategy across both private and public credit markets. The strategy is centered around five key pillars: corporate direct lending, asset-backed lending, performing credit, dislocated credit, and structured credit. This diversified approach aims to deliver both current income and capital appreciation with low volatility and low correlation to broader markets.

Fund size : $97,286,478 (25/06/2025)

Blockchain Integration and Expansion

The ACRED Fund is available on multiple blockchain networks, including Aptos, Avalanche, Ethereum and Solana. This multichain approach enhances liquidity and accessibility, allowing tokens to move seamlessly across different ecosystems through Securitize's interoperability partner, Wormhole. The fund's digital format simplifies operational processes, offering daily native redemptions.

Investment Features and Benefits

The ACRED Fund provides tokenized access to Apollo's diversified global credit strategy, making private markets more accessible and efficient. By leveraging blockchain technology, the fund offers greater secondary liquidity and operational efficiency. Investors can participate in the fund exclusively through Securitize which serves as the digital transfer agent and fund administrator.

Market Position and Fees

The launch of the ACRED Fund marks the first time investors can access the Apollo Diversified Credit Fund through an on-chain product. As of May 18th, 2025, the ACRED Fund has grown to $71 million in AuM. The fund is the largest Private Credit tokenized fund. The management fees are 0.50% and 12 holders are invested into the fund at this date.

11.5.5 Asia: Tokenized Funds Profiles

11.5.5.1 Money Markets

11.5.5.1.1 ChinaAMC HKD Digital Money Market Fund

The ChinaAMC HKD Digital Money Market Fund is a pioneering investment vehicle launched by China Asset Management (Hong Kong) Limited, marking a significant milestone in the realm of tokenized funds. Launched on February 28, 2025, this fund raised an impressive US$110 million at its inception, setting a global record for assets raised for a retail tokenized product. The fund aims to enhance Hong Kong's status as a digital assets hub, investing primarily in Hong Kong dollar short-term deposits and high-quality money market instruments. This innovative fund structure not only provides investors with a secure and liquid investment option but also leverages blockchain technology to offer enhanced transparency and efficiency in fund management.

- Technical Profile
  - **Type**: The fund operates as a native tokenized fund, where ownership is represented by digital tokens on a blockchain, rather than traditional paper certificates.
  - **Fund size** : $ 94,140,000 (30/04/2025)
- Commercial and Administrative Profile
  - **Fees:** The management fee for Class A shares is 0.15% per annum while Class F shares have a lower fee of 0.60% per annum. There is a subscription fee of up to 3% and a redemption fee of up to 1%.
  - **Fund Service Providers:** The fund is administered by Standard Chartered Bank (Hong Kong) Limited, which also acts as the tokenization agent and custodian.
- Investment Strategy Profile
  - **Asset Portfolio:** The fund primarily invests in Hong Kong dollar short-term deposits and high-quality money market instruments, focusing on capital security and liquidity to align with prevailing money market rates.
- Distribution Profile
  - **Subscription Process:** Investors can subscribe to the fund through authorized distributors (OSL Digital Securities Limited and Solomon), who will process subscription requests and facilitate the minting of tokens on the blockchain. The minimum subscription amount is HKD 10 for Class A shares.
- Sales Promise

- **Advantages of Tokenized Offering**: Compared to traditional off-chain offerings, the tokenized structure of this fund provides enhanced transparency, efficiency, and increased liquidity. Investors benefit from real-time tracking of their holdings on a blockchain, reduced administrative costs.

11.5.5.1.2 Bosera USD Money Market ETF

The Bosera HKD Money Market ETF and the Bosera USD Money Market ETF are innovative financial products launched by Bosera Asset Management in collaboration with HashKey Group. The Bosera HKD Money Market ETF focuses on HKD-denominated short-term deposits and high-quality money market instruments, while the Bosera USD Money Market ETF targets USD-denominated assets. Both funds aim to meet the cash management needs of investors by offering direct exposure to high-quality money market instruments.

- Technical Profile

  - **Bosera HKD Money Market ETF:** The fund features a tokenized share class, allowing investors to hold digital tokens representing their shares on a blockchain network.
  - **Bosera USD Money Market ETF**: Similar to its HKD counterpart, this fund also offers a tokenized share class, enabling the representation of shares as digital tokens on a blockchain
  - **Fund sizes** : data not available

- Commercial and Administrative Profile (Fees & Fund Services Providers

  - **Bosera HKD Money Market ETF:** The ongoing charges are estimated to be 0.40% per annum, with a management fee of 0.20% and a subscription fee of up to 1%. The custodian is CMB Wing Lung.
  - **Bosera USD Money Market ETF:** The ongoing charges are also estimated at 0.40% per annum, with a management fee of 0.20% and a subscription fee of up to 1%. The custodian for this fund is BOCI-Prudential.

- Investment Strategy Profile

  - **Bosera HKD Money Market ETF:** The fund invests primarily in HKD-denominated short-term deposits and high-quality money market instruments, aiming to achieve returns in line with prevailing money market rates.
  - **Bosera USD Money Market ETF:** This fund focuses on USD-denominated short-term deposits and high-quality money market investments, seeking to provide returns consistent with prevailing money market rates.

- Distribution Profile

  - **Subscription Process:** Both the Bosera HKD and USD Money Market ETFs utilize HBS (Hong Kong) Limited as the tokenization provider and digital platform operator. HBS employs a distributed ledger technology, specifically the HashKey Chain, to tokenize Class T Shares. This technology allows for the direct recording of shareholders' beneficial ownership in the form of digital tokens, where one token represents one tokenized Class T Share. Transaction data related to subscriptions and redemptions is uploaded by the tokenization provider for reconciliation with the custodian. Both retail and institutional investors can subscribe for or redeem Class T Shares in the form of tokens through eligible distributors. Investors must open an investment account with these distributors, which will manage the digital wallets and fiat currency settlement accounts necessary for handling subscription and redemption transactions.

- Sales Promise

  - **Advantages of Tokenized Offering**: As the first tokenized share classes of ETFs, the Bosera HKD and USD Money Market ETFs significantly enhance liquidity in an already liquid asset class. This innovative structure is likely to attract increased demand from investors seeking efficient access to high-quality money market instruments, thereby potentially improving market dynamics and investor engagement.

11.5.5.1.3 UBS USD Money Market Investment Fund Token (uMINT)

The UBS USD Money Market Investment Fund Token, known as uMINT, marks UBS Asset Management's first venture into the realm of tokenized investment funds. Launched on November 1, 2024, uMINT is built on Ethereum's distributed ledger technology and offers investors access to institutional-grade cash management solutions. The fund is designed to invest in high-quality money market instruments within a conservative, risk-managed framework, catering to the increasing demand for tokenized financial assets. This initiative is part of UBS's broader strategy to leverage digital asset capabilities and enhance fund distribution through innovative solutions.

- Technical Profile

  - **Type**: This fund operates as a native tokenized fund, where each token directly represents a share in the UBS Money Market (USD) fund.
  - **Fund size** : $10,260.20 (25/06/2025)
  - **Subscription via stablecoins** : Yes

- Commercial and Administrative Profile

  - **Fees:** Fee structures for uMINT have not been publicly detailed
  - **Fund Service Providers:** UBS Asset Management serves as the fund manager, and the fund is structured under the UBS (SG) Global Opportunities Variable Capital Company (VCC). Additionally, UBS Tokenize, UBS's in-house tokenization service, plays a crucial role in the fund's issuance.

- Investment Strategy Profile

  - **Asset Portfolio:** uMINT invests primarily in high-quality money market instruments, focusing on maintaining liquidity and capital preservation. The fund aims to provide returns in line with prevailing money market rates while adhering to a conservative investment strategy.

- Distribution Profile

  - **Subscription Process:** Investors can subscribe to uMINT through authorized distribution partners, specifically DigiFT and CapBridge. The fund is authorized in Singapore, subject to regulatory approval. Through DigiFT, investors can utilize their preferred custody wallet solutions, gaining access to real-time redemption capabilities via DigiFT's platform. CapBridge also facilitates access to this innovative investment product for corporate and institutional clients.

- Sales Promise

  - **Advantages of Tokenized Offering**: uMINT's native tokenized structure enhances liquidity and accessibility compared to traditional off-chain offerings. Through the authorized distribution partners, investors can invest in the fund using fiat currency (USD) or stablecoins such as USDC, paving the way for innovative subscription channels.

The launch of uMINT follows UBS Asset Management's earlier initiative to pilot a tokenized Variable Capital Company (VCC) fund in Singapore, announced on October 2, 2023. This pilot is part of a broader VCC framework aimed at bringing various "real world assets" on-chain under Project Guardian. The VCC structure enhances flexibility in fund management, allowing for efficient issuance and redemption of shares, which is crucial for tokenized assets. The fund is restricted to accredited and institutional investors

11.5.5.2 Private Markets

The Invesco US Senior Loan Strategy (iSNR) stands out as the main private markets fund available so far in Asia, specifically in Singapore via distributor DigiFT. It is a tokenized fund that provides exposure to Invesco's senior loan assets, aiming to deliver high current income while preserving capital by investing in floating-rate, senior secured debt of large companies. While the private markets segment with tokenized funds is still in its early stages in Asia, efforts by platforms like ADDX have begun to tokenize shares of private equity funds, lowering investment minimums and expanding access for accredited investors. However, these initiatives remain limited and mostly in pilot or past offering phases, indicating that the market for tokenized private assets in the region is just beginning to develop.

11.5.5.2.1 Invesco US Senior Loan Strategy (iSNR)

The Invesco US Senior Loan Strategy (iSNR) is a tokenized investment fund designed to provide investors with exposure to the fund Invesco US Senior Loan (share class H USD). The fund aims to provide high current income while preserving capital by investing in adjustable-rate senior loans and targeting floating-rate, high-yield returns from the senior secured debt of large companies. Using Invesco's extensive experience in private credit iSNR aims to deliver a high level of current income while preserving capital. With a current yield of 8.33% and a focus on senior, first-lien debt, the fund offers a investment opportunity for those seeking income strategy with the benefits of tokenization distribution.

- Technical Profile

- **Type**: This fund operates as a tokenized share class, allowing investors to hold digital tokens that represent their shares in the Invesco US Senior Loan Strategy. This structure enhances transparency and efficiency in ownership management.
- **Size of the tokenized fund is not available** (the Invesco US Senior Loan Strategy has $5.7bn in AuM)
- **Subscription via stablecoins** : Yes

- Commercial and Administrative Profile

- **Fees:** Fee structures for iSNR have not been publicly detailed
- **Fund Service Providers:** The fund is managed by Invesco Senior Secured Management, Inc., and issued by Red Cedar Digital Pte Ltd, incorporated in Singapore.

- Investment Strategy Profile

- **Asset Portfolio:** The Invesco US Senior Loan aims to provide high current income while preserving capital by investing in adjustable-rate senior loans and targeting floating-rate, high-yield returns from the senior secured debt of large companies. The fund primarily invests in senior secured loans, with 86.85% of its portfolio consisting of senior, first-lien loans. The fund focuses on loans rated 'B' or higher, ensuring a level of credit quality while aiming for a high current income.

- Distribution Profile

- **Subscription Process:** Investors can subscribe to iSNR through authorized distribution partner : DigiFT in Singapore. Through DigiFT, investors can utilize their preferred custody wallet solutions, gaining access to real-time redemption capabilities via DigiFT's platform. Investors can subscribe to iSNR with a minimum investment of $10,000, using fiat currency (USD) or stablecoins such as USDC or USDT. The fund offers daily subscription and redemption options, with a settlement time of T+5, excluding non-trading days.

- Sales Promise

- **Advantages of Tokenized Offering**: : The fund is the first and only tokenized private side senior loan strategy with daily liquidity, offering institutional and accredited investors on-chain access. This structure enhances liquidity and flexibility compared to traditional off-chain offerings, allowing for on-demand exits and benefiting from daily NAV pricing.

11.5.5.2.2 Fullerton Optimised Alpha Fund (Fullerton Fund Management)

The Fullerton Optimised Alpha Fund is a private equity fund of funds managed by Fullerton Fund Management, a subsidiary of Temasek. It aims to deliver attractive risk-adjusted returns through diversified investments across various private equity strategies and geographies. This fund provides investors with exposure to a broad portfolio of private equity assets, focusing on long-term capital appreciation. The tokenized share class offering was a past subscription event available only during a specific period, highlighting that while the subscription process was streamlined via tokenization, liquidity remains limited and is not continuously available.

11.5.5.2.3 Partners Group Global Value SICAV Fund (Partners Group)

The Partners Group Global Value SICAV Fund is a diversified private equity fund managed by Partners Group, a leading global private markets investment manager. The fund invests across sectors and regions, including North America, Europe, and Asia Pacific, targeting long-term growth through exposure to over 500 underlying companies and assets. ADDX's tokenization of this fund allowed accredited investors to participate with lower minimum investments via a tokenized share class. This was a past offering with subscription open only for a limited time, reflecting that although tokenization accelerates access, liquidity is restricted to certain windows.

11.5.5.2.4 Hamilton Lane Global Private Assets Fund (Hamilton Lane)

The Hamilton Lane Global Private Assets Fund provides diversified exposure to private equity, private credit, and real assets globally. Managed by Hamilton Lane, a prominent alternative investment management firm, the fund seeks to generate attractive risk-adjusted returns through a multi-asset private markets approach. The tokenized share class was offered through ADDX as a past subscription event, available only during a defined period. This underscores that despite faster subscription and settlement processes enabled by tokenization, investors should be aware that liquidity is not available at all times.

11.5.5.2.5 Schroder Global Real Estate Fund (Schroders)

The Schroder Global Real Estate Fund invests in a diversified portfolio of real estate assets worldwide, aiming to provide income and capital growth. Managed by Schroders, a global asset management company, the fund focuses on direct and indirect real estate investments across multiple sectors and regions. ADDX facilitated a tokenized share class subscription for this fund, which was a past offering accessible only during a specific subscription window. This illustrates that while tokenization simplifies and speeds up the investment process, liquidity remains limited and subject to availability periods.

11.5.6 Europe: Tokenized Funds Profiles

11.5.6.1 Money Markets

11.5.6.1.1 Spiko EU T-Bills Money Market Fund (EUTBL)

The Spiko EU T-Bills Money Market Fund is a pioneering financial product designed to offer investors a secure and efficient way to preserve capital while achieving consistent performance aligned with or exceeding the Euro Short Term Rate (€STR). As one of the first tokenized money market funds in Europe, it leverages blockchain technology to enhance transparency and accessibility. Managed by Twenty First Capital, this fund invests exclusively in Euro-denominated Treasury Bills issued by Eurozone governments, providing a robust and sovereign-backed investment vehicle. With a focus on short-term liquidity and minimal risk, the fund is ideal for investors seeking a stable and reliable financial instrument.

- <u>Technical Profile</u>

  - **Type**: The Spiko EU T-Bills Money Market Fund is a native tokenized fund based on public blockchains, utilizing Ethereum, Arbitrum and Polygon

networks. Investors hold tokens representing shares in the fund, which are managed through a digital wallet.
- **Fund size** : $246,676,471 (25/06/2025)
- **Subscription via stablecoins** : No

- Commercial and Administrative Profile

- **Fees:** The fund charges a management fee of 0.25% annually, with no subscription or redemption fees. This fee is deducted daily on a prorated basis.
- **Fund Service Providers:** The fund is managed by Twenty First Capital based on the protocol provided by Spiko**.** CACEIS, a subsidiary of the Crédit Agricole group, acts as the custodian and fund administrator. PwC acts as auditor.

- Investment Strategy Profile

- **Asset Portfolio:** The fund invests 100% of its assets in Treasury Bills issued by investment-grade Eurozone countries. It maintains a portfolio with an average maturity of under 60 days, ensuring high liquidity and minimal risk exposure.

- Distribution Profile

- **Subscription Process:** The Spiko EU T-Bills Money Market Fund is accessible through Spiko and Twenty First Capital, offering flexible investment options. Shares are tokenized and managed via Shared Electronic Recording Devices (DEEP : Dispositifs d'Enregistrement Électronique Partagé) like Ethereum and Polygon, ensuring secure transactions. Investors are responsible for managing their tokens through a digital wallet. Subscription and redemption orders can be placed with either Spiko Finance or Twenty First Capital.

- Sales Promise

- **Advantages of Tokenized Offering**: Enhanced transparency, efficiency, and increased liquidity.

11.5.6.1.2 Spiko US T-Bills Money Market Fund (USTBL)

The Spiko US T-Bills Money Market Fund is an investment vehicle designed to offer investors capital preservation and consistent performance aligned with the Fed Funds capitalized rate. As a tokenized money market fund, it represents a modern approach to investment, leveraging blockchain technology for enhanced transparency and security. Managed by Twenty First Capital, the fund invests exclusively in U.S. Treasury Bills, providing a robust and sovereign-backed investment option.

- Technical Profile

- **Type**: The Spiko US T-Bills Money Market Fund is a native tokenized fund based on public blockchains, utilizing Ethereum, Arbitrum and Polygon networks. Investors hold tokens representing shares in the fund, which are managed through a digital wallet.
- **Fund size** : $95,374,463 (25/06/2025)
- **Subscription via stablecoins** : No

- Commercial and Administrative Profile

  - **Fees:** The fund charges a management fee of 0.25% annually, with no subscription or redemption fees. This fee is deducted daily on a prorated basis.
  - **Fund Service Providers:** The fund is managed by Twenty First Capital based on the protocol provided by Spiko**.** CACEIS, a subsidiary of the Crédit Agricole group, acts as the custodian and fund administrator. PwC acts as auditor. Additionally, BNY acts as the sub-custodian for U.S. T-Bills, safeguarding and managing the physical and electronic records of the T-Bill holdings on behalf of the fund and JPMorgan Chase acts as Correspondent Bank, facilitating the settlement and transfer of USD for the fund

- Investment Strategy Profile

  - **Asset Portfolio:** The Fund invests 100% of its total assets in U.S. Treasury Bills (T-Bills), repurchase agreements secured by such securities and cash. The Fund keeps an average maturity of its portfolio under 60 days. The maximum maturity of any asset held by the Fund is less than 6 months. The cash holdings cannot exceed 10% of its total assets.

- Distribution Profile

  - **Subscription Process:** The Spiko US T-Bills Money Market Fund is accessible through Spiko and Twenty First Capital, offering flexible investment options. Shares are tokenized and managed via Shared Electronic Recording Devices (DEEP : Dispositifs d'Enregistrement Électronique Partagé) like Ethereum and Polygon, ensuring secure transactions. Investors are responsible for managing their tokens through a digital wallet. Subscription and redemption orders can be placed with either Spiko Finance or Twenty First Capital.

- Sales Promise

  - **Advantages of Tokenized Offering**: Enhanced transparency, efficiency, and increased liquidity.

11.5.6.1.3 abrdn Liquidity Fund (Lux) – US Dollar Fund (AAULF)

The abrdn Liquidity Fund (Lux) **–** US Dollar Fund (AAULF) is a tokenized money market fund designed to preserve capital and provide liquidity while delivering returns aligned with short-term money market rates, using SOFR as a performance benchmark. Managed by abrdn Investments and accessible through Archax's regulated platform, this fund represents a step in the evolution of financial markets by leveraging blockchain technology on the XRP Ledger. The fund is targeted at institutional and professional investors.

- Technical Profile

  - **Type**: The fund is a tokenized share class of the existing abrdn Liquidity Fund (Lux).
  - **Fund size** : $44,905,635 (25/06/2025)

- Commercial and Administrative Profile

  - **Fees:** The fund charges a management fee of 0.10% annually, with no subscription or redemption fees. Archax (protocol provider and custodian) imposes an additional access fee of 0.20%.
  - **Fund Service Providers:** Archax serves as the protocol provider and custodian, while Citibank acts as the fund administrator. KPMG is the auditor.

- Investment Strategy Profile

  - **Asset Portfolio:** The abrdn Liquidity Fund (Lux) **–** US Dollar Fund aims to preserve capital and provide liquidity while delivering returns aligned with short-term money market rates, using SOFR as a benchmark. It invests in high-quality US Dollar-denominated money market instruments, maintaining a minimum liquidity of 10% overnight and 30% maturing within a week. The fund's securities have a maximum maturity of 397 days, with a weighted average maturity of no more than 60 days and a weighted average life of no more than 120 days. The fund may include assets with zero or negative yields in adverse conditions, adhering to the "abrdn Liquidity US Dollar Fund Investment Approach."

- Distribution Profile

  - **Subscription Process:** Investors can subscribe to the fund through Archax platform, using either fiat currencies or stablecoins. The minimum investment is $5,000, and subscriptions are processed daily.

- Sales Promise

  - **Advantages of Tokenized Offering**: The tokenized share class of the abrdn Liquidity Fund offers significant operational cost savings and settlement efficiencies compared to traditional offchain offerings. By leveraging the XRP (Ripple) Ledger, investors benefit from enhanced transparency and reduced transaction costs.

11.5.6.1.4 BNP Paribas Funds Euro Money Market (T DLT share class)

The BNP Paribas Funds Euro Money Market T DLT is an innovative tokenized share class initiative by BNP Paribas AM, designed to enhance operational efficiency and transaction speed through blockchain technology. This internal project, currently reserved for BNP Paribas group entities, represents a significant step in the digital transformation of financial products. By leveraging Allfunds Blockchain, BNP Paribas has issued digital share classes of its long-established Euro Money Market fund, enabling real-time order execution and improved liquidity management. This initiative aligns with BNP Paribas's commitment to pioneering digital asset solutions and exploring the potential of tokenization within its internal operations.

- Technical Profile

- **Type**: The fund features a tokenized share class, utilizing Allfunds Blockchain, a private permissioned blockchain, to facilitate secure and efficient transactions.
- **Fund size** : data not available

- Commercial and Administrative Profile

  - **Fees:** Specific fees are not detailed
  - **Fund Service Providers:** BNP Paribas Securities Services acts as the transfer agent and fund dealing service provider.

- Investment Strategy Profile

  - **Asset Portfolio:** The fund invests in Euro-denominated money market instruments, maintaining a focus on liquidity and capital preservation, consistent with traditional money market fund strategies.

- Distribution Profile

  - **Subscription Process:** Currently, the fund is accessible only to BNP Paribas group entities and not open to external investors. The project is in a pilot phase, exploring internal applications and efficiencies.

- Sales Promise

  - Project in a pilot phase

11.5.6.2 Private Markets

11.5.6.2.1 Hamilton Lane Global Private Assets (GPA) Fund

In February 2024, Hamilton Lane, Sygnum Bank, and Apex Group launched a Distributed Ledger Technology (DLT)-registered share class for the Luxembourg-based Hamilton Lane Global Private Assets (GPA) Fund, a regulated alternative investment fund valued at approximately $3.8 billion. This initiative involves the issuance of a DLT-registered, fully compliant share class on the Polygon blockchain, marking a pioneering step in the native tokenization of private asset fund shares rather than simply tokenizing existing shares.

The share class is registered under Luxembourg law, benefiting from the country's well-established regulatory framework for alternative investment funds (AIFs). It is structured as a regulated share class, ensuring investor protections and compliance with applicable securities laws. Apex Group acts as the global fund administrator and transfer agent, responsible for fund administration, investor onboarding, and transfer processing. Sygnum Bank provides the DLT infrastructure, managing the registration and custody of the digital shares, while FundRock-LRI handles the on-chain registry, maintaining a transparent and immutable ledger of share ownership.

Hamilton Lane, with over $900 billion in private market assets under management, leverages this technology to reduce operational complexity and lower minimum investment thresholds, thereby enhancing accessibility for a broader range of investors. The use of Polygon blockchain, a Layer 2 Ethereum scaling solution, offers benefits such as faster transaction speeds and lower gas fees, making the process more efficient and cost-effective.

This DLT-registered share class automates subscription, redemption, and transfer processes, significantly reducing settlement times compared to traditional private equity fund transactions. While liquidity remains subject to the fund's terms and private market constraints, the blockchain-based approach improves transparency, auditability, and operational efficiency. This partnership sets a new standard for private asset fund tokenization, combining regulatory compliance with the innovative capabilities of blockchain technology to democratize access to private markets.

The DLT-registered share class of the Hamilton Lane Global Private Assets (GPA) Fund, launched in partnership with Sygnum Bank and Apex Group, is primarily available to Sygnum Bank clients. Typically, Sygnum offers such private asset investment opportunities to its institutional and professional clients, as well as to qualified or accredited investors who meet specific regulatory criteria. These investors generally have the financial sophistication and capacity to invest in alternative assets with limited liquidity.

Given the regulatory framework and the nature of the fund, retail investors are usually excluded from participation. The offering targets investors seeking exposure to private markets through a more accessible and efficient tokenized structure, benefiting from reduced minimum investment thresholds while maintaining compliance with applicable investor eligibility requirements.

11.6 Amundi Initiatives & Insights

11.6.1 Internal Survey: Questions

https://www.surveymonkey.com/r/Tokenize

1. What type of clients do you cover?
2. What is your region of coverage ?
3. In your opinion, which countries are the most advanced with respect to fund tokenization?
4. What is your level of knowledge about fund tokenization?
5. How would you assess the following benefits of fund tokenization for end clients?
6. Which fund strategy should be tokenized in priority?
7. Which types of investors do you believe would be most interested in investing in or distributing tokenized share classes?
8. Have you discussed fund tokenization with any clients over the last 12 months?
9. Over which period do you think tokenized share classes could generate *significant* inflows for Amundi?
10. Beyond the generation of inflows for Amundi, what other benefits could be generated by fund tokenization for Amundi?
11. In your opinion, fund tokenization is:
    - A gadget (asset managers will use it as a marketing tool to position themselves as tech-savvy)

- A marginal improvement (it will result in slight operational improvement, but the final clients won't see much of a difference)
- A revolution (think the "*third revolution in asset management after the mutual funds and the ETFs*")

Business Intelligence

The Business Intelligence team is a market research unit that contributes to the definition of the group's strategy, development of new products and services, and business management through its works and publications on all aspects of the asset management industry and Amundi's competitive positioning.

Staff & Coverage

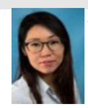
Claire-Anne Perini-Boussier
Team Head

Market Research

Julien Laplante
Unit Head, Team Deputy Head

Lucas Chomette
Client: Distribution
Themes: Digital, Technology
Region: France

Romain Peretti
Client: Institutions, Corporates
Strategy: Money Markets
Themes: Industry



Jung-eun Kim
Client: Distribution
Strategy: Equity, Thematics
Themes: Industry

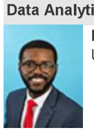
Antoine Duquesnoy
Strategy: Multi-Asset, Quant, Passive
Themes: Innovation

Vivienne Zhou
Strategy: Alternatives (Liquid), Emerging Markets
Themes: Digital, Technology
Region: Asia

Carine Chouchana
Client: Institutions, Corporates
Strategy: Fixed Income, Money Markets, ESG
Region: Americas

Patrizia Antonini
Strategy: Alternatives (Private Assets)
Region: Italy

Data Analytics



Folly Nyame
Unit Head

Fabrice Chartrel
Development & Data Visualization

Chen Qian
Corporate Analytics & Support

Victor Persent
Product Analytics & Support

Contacts

iWatch Business Intelligence Platform

iWatch platform, to access our internal publications, reporting and studies as well as third-party analysis

Reach the team:

- Team email address: business.intelligence@amundi.com
- Team distribution list: G-X-BINT

Amundi Business Intelligence
business.intelligence@amundi.com

Amundi Business Intelligence
business.intelligence@amundi.com