Tokenizing Real-World Assets

Economic Rationale and
Use Cases Across Financial Asset Classes

Authors:

Alessandro Picinati di Torcello[1] - Research Analyst
Giorgio Vella[2] - Research Analyst
Luca Pennella - Head of Research Division

1 Conceptual Foundations of RWA Tokenization

1.1 What is RWA Tokenization?

Tokenization of Real-World Assets (RWA) refers to the issuance of digital tokens materializing ownership, claims or entitlement to real-world assets such as financial instruments, real estate or commodities. Tokens are deployed using smart contracts on digital ledger technologies (DLT), primarily blockchains, acting as an immutable, transparent, tamper-resistant, and programmable registry of ownership[1]. Tokenization serves as a medium to replicate the asset's economic characteristics in a form that can easily be transferred, settled and integrated in a digital ecosystem.
In practice, the token serves as a digital certificate for an off-chain asset. The validity and utility of the token are enforced by being cryptographically and legally tied to the off-chain asset. Typically, this is done through a legal agreement and managed by a Special Purpose Vehicle (SPV) or trust entity that owns the underlying asset. The token then represents a claim on the SPV, entitling the owner of the token to a share of the asset economics, such as income flow, value appreciation, or liquidation proceeds[9].
The blockchain then keeps a record of the token ownership, transfers, and activity on an immutable, tamper-resistant, and transparent ledger. The benefit of tokenization is to improve the liquidity of traditional assets through a seamless issuance and trading process while providing transparent and

[1] Alessandro Contributed to Section 1
[2] Giorgio Contributed to Section 2

immutable ownership tracking.

1.2 Economic Rationale and Market Frictions

Tokenization of RWA provides a new layer of efficiency, transparency and compostability to traditional financial systems. This transformation comes from the unique properties of blockchains and smart contracts to reduce transactional friction, lower operational costs, and expand access to markets traditionally fragmented or exclusionary.

1.2.1 Reduction of Frictions and Costs

Traditional finance involves many intermediaries, such as brokers, registrars, custodians, and clearinghouses, which play a critical role in the issuance, settlement, and servicing of financial assets. However, each contributes to adding costs, latency, and counterparty risk. Tokenization of RWA replaces many of these manual processes using the smart contracts embedded code-based logic, which can automate tasks such as dividend distribution, interest payment or record keeping [1].
Using a blockchain as a single source of truth eliminates the need for multiple players to maintain and reconcile their individual ledgers, thereby minimising reconciliation errors and post-trade processing time. For issuers, this could represent substantial cost savings

1.2.2 T+0 Settlement and Counterparty Risk Reduction

Traditional capital markets typically operate with a T+2 model, implying that transfers of funds and ownership are usually completed 2 days after the trade. This delay introduces counterparty risk, the need for capital buffers and capital allocation inefficiencies. By contrast, tokenized assets allow for atomic settlement, meaning that both assets and payment can be exchanged in one single instantaneous transaction.
Smart contracts are able to enforce a delivery-versus-payment (DvP) logic, ensuring that both sides of the trade complete simultaneously or not at all. This DvP logic not only reduces the settlement failure risk, but it also enables T+0 settlement, reducing the need for clearing houses or trusted third parties[6].

1.2.3 Fractionalization and Market Inclusion

Another advantage of RWA tokenisation is that it enables fractionalization. Assets such as real estate, collectibles, or infrastructure are typically illiquid and inaccessible to most investors. With tokenization, it becomes possible

to divide these assets into granular digital units, enabling investors to get on board at far lower minimums.
This democratization enables retail and international investors who were previously locked out due to the minimum ticket price, operational friction, or jurisdictional constraints to access these investments, thus growing the investor base. As an example, a $10 million property could be divided into 100,000 tokens for $100 each, opening participation to smaller investors without changing the asset's economics.
Furthermore, fractionalization enables issuers to tap into a larger global liquidity pool, facilitating more efficient capital formation. It also distributes the risk among a larger pool of investors, reducing the reliance on large institutional investors. Finally, it also creates a pathway to secondary markets that would otherwise not exist in traditional structures.

1.2.4 Composability and Financial Innovation

Tokenized RWAs are not only transferable tokens of ownership, they are also programmable, which enables composability. Composability refers to the process of plugging tokenized assets into financial contracts and platforms, allowing them to serve new purposes. For example, tokenized treasury bonds can serve as collateral in decentralized lending platforms or be wrapped into structured products.
This level of integration with decentralized finance (DeFi) ecosystems enables the creation of new financial instruments. As smart contract sophistication continues to increase, the range of composable applications grows to include real-time asset rebalancing, portfolio tokenization, collateralized derivatives, and algorithmic reallocation of income streams[10].
This composability effectively places tokenized RWAs as "money legos", interoperable modules in a broader financial architecture. Composability expands the applications and utility of tokenized RWAs, but it also paves the way to more agile, open, and efficient capital markets.

1.2.5 Transparency, Auditability, and Trust

The role of a blockchain-based registry is to provide an immutable, transparent, and public audit trail. Each transaction, ownership change, and contract execution is timestamped and permanently recorded, greatly enhancing transparency for both regulators as well as investors, supporting financial auditing, compliance monitoring and investor protection.
With tokenized assets, key performance indicators, such as income distributions, NAV calculations, and fund flows, are available directly on-chain. This transparency allows all stakeholders to independently verify information

without relying on issuer-provided reports, thus reducing the risk of fraud or missreporting, as well as lowering the cost and complexity of due diligence. In addition, tokenization strengthens the trust between counterparties by eliminating asymmetry of information and automating report mechanisms. Investors can be more confident in the legitimacy and solvency of the investment, given the ability to monitor wallet-level activity and verify asset reserves. While regulators gain a new tool for surveillance and enforcement, with the capacity to monitor in real time market activities.

1.2.6 Summary of Benefits

Major inefficiencies in traditional markets are addressed by tokenization, improving access, automation, and transparency, capabilities that are at the heart of this technologie, lay the foundations of more inclusive and programable capital markets.

1.3 Tokenization Architecture: Smart Contracts and Compliance

Tokenization is not just a way of issuing digital assets but its a multi layered process that merges technological and financial components into one framework. The effectiveness of tokenized RWAs reposes on two pillars. The automation of functionalities, and the legal enforceability through compliance mechanisms. Bith dimensions must be designed together to preserve the economic rights of the token holder as well as alignment with the regulatory standards.

1.3.1 Smart Contracts: Automating Asset Logic

Smart contracts are self executing programs stored on a blockchain that perform actions when certain conditions are met. In the context of RWA tokenization, smart contracts perform several essential functions.
Issuance and Transferability: when an asset is tokenized, the smart contract will mint (create) a fixed number of tokens representing the fractional ownership. The contract will record the total supply of token and link each wallet to its corresponding balance and thus enable tracking of transfers. This structure forms the basis of the on-chain asset cap table.
Automated Distributions: smart contracts are able to distribute periodic inicome. For instance, a smart contract can handle the interest payments of a tokenized bond and pay the interest income pro-rata to each token holder in real time. This eliminates the needs for intermediaries such as paying agents or custodians [9].

Atomic Transactions and Delivery-vs-Payment (DvP): smart contracts allow atomic transaction where multiple steps of a transaction happen simultaneously in one single, indivisible operation. This is applied in a DvP logic where payment and transfert of token only happen if the both operations are confirmed, else, it is rolled back, thus reducing counterparty risk ensuring finality[1].
Corporate Action Hooks: Fonction embeded into the smart contract allow for real word events such as stock splits, redemption or liquidation to be processed. These events can be triggered manually by the issuer or automatically through oracles that will feed data to the smart contract. This ensures that real-world modifications of the underlying are reflected on the token.
Lifecycle Integration: smart contracts can also support the full lifcycle of an asset, from initial issuance (minting) to its eventual redemption (burining). First, at primary issuance, the tokens are allocated to clients wallet once they have clear KYC and AML checks, and records are kept both on on-chain and off-chain registries to ensure compliance. In the secondary trading phase, transfers could be constrained through whitelisting mechanisms or via off-chain contracts and registry control. This allow for the enforcement of jurisdictional rules and investor eligibility. At maturity or upon redemption, the contract allow the token to be surrenders (burned) in exchange for settlement in FIAT, stablecoins or other forms. The token supply on-chain decreases accordingly ensuring market closure
Composability: smart contracts can be interoperable with other blockchain applications allowing the tokenized asset to be used in DeFi services such as lending and borrowing expanding the utility beyond the mere ownership representation.

1.3.2 Legal Compliance and Token Standards

Through RWA tokens, holders are given economic rights in the form of income, appreciation, or redemption which implies that they meet the definition of securities unders most regulatory framework. As a consequence, a regulatory compliance ahse to be built into the token system, either directly on-chain through technical restriction or off-chain using robust legal processes and administrative controls.
On-Chain Models: Permissioned token standards like ERC-3643 allow for directly embedded regulatory rules into the token logic such as KYC/AML or investor elgibility. Such models rely often on identity infrastructure like ONCHAINID that allow blockchain addresses to be linked to verified identities [24], which as a result only allows autorized parties to hold, receive or transfer tokens.
Off-chain Models: The majority of live projects use the token standard ERC-

20 due to its simplicity and interoperability with DeFi protocols[7]. However, because the ERC-20 standard does not support embedded compliance rules, regulatory controls happen outside the blockchain through legal contracts, centralized registries, traditional enforcement of KYC/AMLor retain freeze or revoke rights.
The hybrid structure of off-chain models provides greater liquidity and easier integration with existing DeFi protocols but also introduces reliance on legal enforcment mechanisms outside the blockchain. This structure increases non-compliance risk if tokens are transferred to unautorized holders for instance. As regulation matures and tooling improves, it is to be expected that permissioned standards like ERC-3643 adoption will grow.
Projects must adopt their model based on their investor base, regulatory regime and operational needs and complexity. Today, the prevailing trend is towards the hybride model with ERC-20 tokens traded on controlled marketplaces or wrapped in compliant permissioned layer.
Ultimately, succes of RWA tokenization depends on allaigning the technical architecture with the evolving legal frameworks such as MiCA in the European Union or the SEC guidance in the US. Only through this integration can tokenized assets scale across jurisdictions and serve both insititutioanl and retail investors.

2 Tokenization Across Asset Classes: Case Studies

2.1 Tokenized Public Equities: The Case of Ondo Global Markets

Public equity refers to ownership shares in companies that are listed on public stock exchanges such as the NYSE or Nasdaq. Traditionally, this form of equity is accessible to investors via brokers, implying limited trading hours[3] and fees. Investment vehicles[4] such as ETFs and Mutual Funds allows investors to diversify their portfolio, but they add more management fees and not so clear underlying allocations[5]. This traditional structure contrasts with newer tokenization-based approaches to accessing financial assets.
Ondo Global Markets is a platform that facilitates the tokenization of real-world assets (RWAs), specifically designed for non-U.S. investors. Let's take

[3] Markets are open for regular trading 5 days a week, 9:30 a.m. to 4:00 p.m. ET

[4] An investment vehicle is any legal or financial structure used to hold and invest money, such as a mutual fund, ETF, pension fund, or trust—through which investors gain exposure to assets (e.g. stocks, bonds, real estate) without owning them directly. Its main advantage is that it allows investors to diversify their portfolio without purchasing each underlying asset themselves.

[5] Usually the composition of the fund or ETF is not fully disclosed to the public. This implies that the investor is not aware of the precise weight of each underlying asset in the portfolio

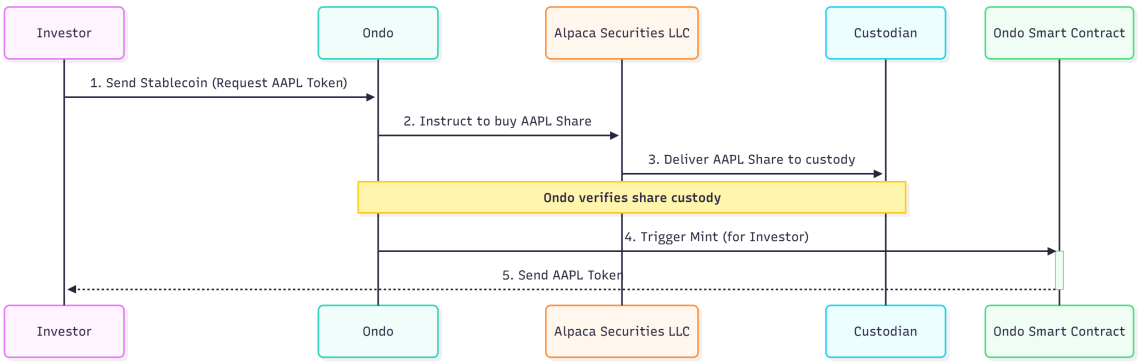

Figure 1: Sequence Diagram of The Minting Process for an AAPL stock

a step back. Ondo is a company that takes established financial products and creates digital tokens that represent ownership in these yield-generating assets. In the case of their product Ondo Global Markets, Ondo tokenizes stocks and other publicly traded securities – such as ETFs -, giving holders the same economic - and risk! - exposure as they would receive if they bought the assets through their brokers. The Ondo tokenized stocks are designated by the stock ticker followed by the "on" suffix (for example, the Apple stock tokenized by Ondo would become "AAPLon") and each token mirrors the return of the underlying stock, and is fully 1:1 backed by underlying shares. The minting process of an Apple stock is as follows:

- An investor sends stablecoin to Ondo to buy AAPL on token (can also be a fraction of a token)
- Ondo instructs its broker (Alpaca Securities LLC) to buy one share of AAPL on the open market
- That one AAPL share is delivered to the custodian account.
- Ondo's smart contract mints one new AAPL on token and sends it to the investor's wallet.
- Dividends received over time are immediately reinvested into new tokens. Reverse applies when burning tokens (investor cash out).

When an investor places an order, the platform procures the real stocks from the NYSE or NASDAQ and mints tokens. When the investor sells, the tokens are burned and stocks are sold on the exchange. This process implies no inventory restrictions: there is the same supply as there is in the stock exchange. KYC[6] is required, and since the minting and burning implies buying and selling the

[6] KYC, or "Know Your Customer", is a set of processes that allow banks and other financial institutions to confirm the identity of the organisations and individuals they do business with, and ensures those entities are acting legally.

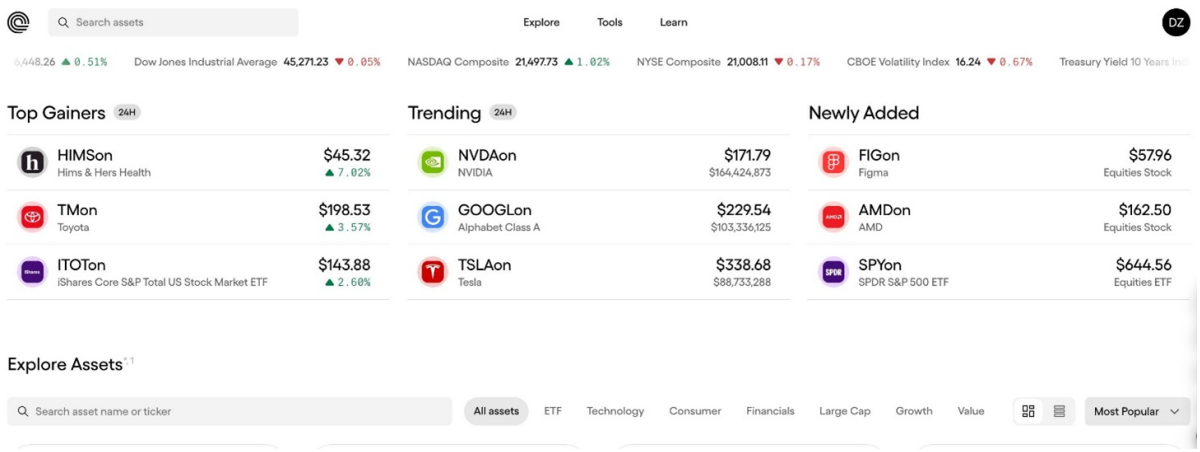

Figure 2: Ondo Global Markets Interface

underlying stock, trading is active only 24/5 (overnight sessions are provided by alternative trading systems[7]), while transfers are active 24/7, since the tokens are minted on the Ethereum blockchain (Ondo has plans to expand to Binance, Solana, and their own Ondo blockchain in the future). How does Ondo profit? Ondo states they do not charge any minting, redemption or management fees. Their source of income is a small spread between the buy and sell price, just like traditional brokers. For example, if AAPL is trading at 240$, the price shown into Ondo Global Markets could be 240.5$. Those 5 cents are Ondo's profit.

Why choose tokenized versions and not the real underlying assets traded onto the NYSE/Nasdaq? Global crypto users, especially non-US users, have never had a feasible and cheap opportunity to easily invest in US stocks. Tokenized equity removes much of the friction of cross-border banking[8], as investors can fund positions instantly via stablecoins without delays or fees of international banking networks. Additionally, Ondo allows 24/7 transferability and 24/5 Institutional trading, enabling investors to react to macroeconomic events typically trapped behind the NYSE's opening hours.

Reference [19, 4, 25, 27, 6]

[7] An Alternative Trading System (ATS) is a SEC-regulated trading venue that matches buyers and sellers of securities but is not a registered national exchange like the NYSE or Nasdaq. Unlike traditional exchanges, which have rigid opening and closing bells, an ATS is often an electronic network that can operate independently of standard market hours.

[8] Ondo still requires strict KYC procedure; there is a distinction between funding ease and regulatory ease. Ondo proposes a significantly easier approach thanks to stablecoins transfers, but this does not imply that it allows retail users to bypass U.S. securities laws or identity verification

2.2 Tokenized Institutional Credit Funds: Janus Henderson's JAAA via Centrifuge

Another popular type of investment vehicles consists of Institutional funds, that are funds specifically designed for institutional investors such as Pension Funds, Banks, Asset Managers. Centrifuge, a platform that provides the infrastructure for asset managers to tokenize and manage RWA on-chain, recently partnered with Janus Henderson, a British asset manager, to bring its flagship CLO fund fully on-chain as a native, blockchain powered investment product. The fund we're talking about is the JAAA CLO, a Collateralized Loan Obligation fund, which is a vehicle that buys hundreds of corporate loans. It then finances these purchases by selling "tranches" (slices) to different investors. In particular, the JAAA fund is designed to invest exclusively in AAA-rated senior tranches of CLOs (as of the 31st of march 2025, 99.3% of the fund is composed of AAA credit quality loans).
Reference [5, 6, 12]

2.3 Tokenized Government Treasuries: The BlackRock BUIDL Fund

Demand for tokenized government treasuries[9] is vastly larger and has seen more institutional demand than the market for tokenized equities. The difference in demand is driven by utility: primary demand for tokenized treasuries are from crypto-natives companies sitting on piles of stablecoins such as USDC[10]. Tokenized treasuries allow them to instantly and on-chain convert those USDC, that are not generating any yield, into a token that provides them the risk-free yield of U.S. treasuries.
Blackrock observed this trend and launched its own market fund through its partner Securitize Markets LLC, called BUIDL, tokenized on the Ethereum blockchain. The fund invests in cash, US treasury bills and repurchase agreements, allowing investors to earn risk-free yield daily, as the fund's token is pegged to $1, and the dividends are paid daily in the form of new tokens to the holder's wallet. The fund computes daily income and credits to holder wallets via the smart contract; that is mechanically done by minting additional tokens to the investor's wallet. While each token remain at $1 value, the count of tokens in the wallet rises daily. The Fund is designed exclusively for

[9] Government treasuries are debt securities issued by a national government to finance public spending. They pay a fixed or variable interest rate and are generally considered low-risk instruments because they are backed by the issuing government.

[10] USDC is a U.S. dollar-denominated stablecoin issued by Circle. Each token is designed to maintain a 1:1 value with the U.S. dollar and is backed by short-term U.S. government securities and cash reserves, allowing users to hold and transfer dollar-equivalent value on blockchain networks.

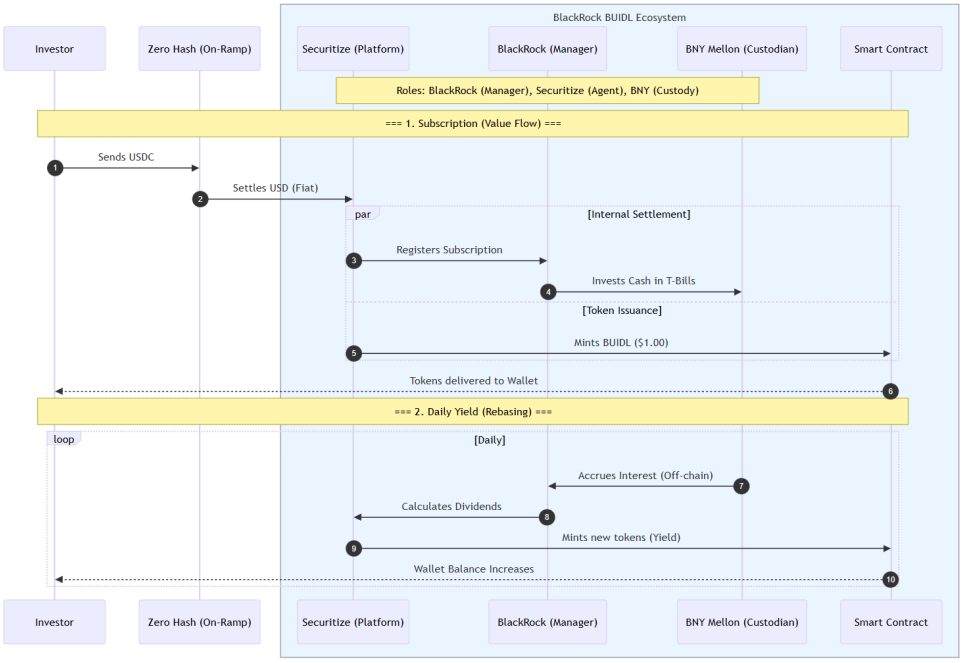

Figure 3: Operational Architecture of BlackRock's BUIDL Fund. Mapping the interaction between the Fund Manager (BlackRock) and infrastructure partners (Securitize, BNY Mellon, Zero Hash) during subscription and settlement.

Qualified Purchasers with a $5 million minimum investment, and is managed entirely by BlackRock, while Securitize acts as a transfer agent and tokenization platform, and the Bank of New York Mellon serves as the custodian of the Fund's RWA assets. Since it's March 2024 launch, BUIDL has grown to $2.2B in AUM – as of September 2025 - becoming the largest tokenized asset and a catalyst for the surge in tokenized treasuries. BUIDL is a customized ERC-20 token. It was initially launched on the Ethereum network and has since been expanded to multiple chains, including Arbitrum, Avalanche, Polygon, and Solana, to maximize its accessibility. The Subscription process requires the usage of U.S. Dollars (fiat), however since October 2024 Securitize announced a partnership with Zero Hash, a leading crypto and stablecoin infrastructure platform, that enables investors to subscribe to the fund using USDC, allowing real fully on-chain subscription. Since the launch of this feature, the fund has seen a growth of over $1.5B in AUM.
Reference [11, 6, 8, 18, 21]

2.4 Tokenized Real Estate: Lofty.ai and RealtyX

Tokenization can be also applied to Real Estate. One of the key benefits is that it allows fractional real estate, transforming illiquid assets such as properties to more liquid assets, turning houses into tokens that anyone can trade on. This pretty much removes the initial barrier of 100+ thousand USD usually

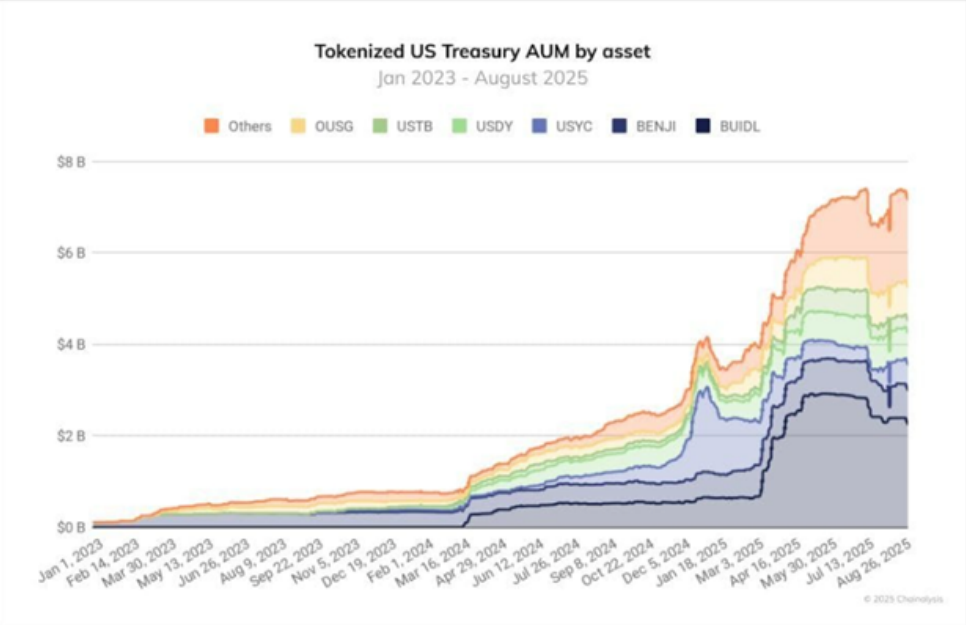

Figure 4: Tokenized US treasury Assets Under Management by asset

needed to enter the market. One of the key company offering fractional real estate is Lofty.ai, a marketplace (similar to eBay) where homeowners can sell a portion of their property's equity to investors over the Algorand blockchain. When the property owner submits their property, Lofty and its third-party partners conduct due diligence, including an appraisal, inspection, and background/credit check on the owner. The owner then transfers the property's deeds to a newly created, single purpose LLC that legally owns the property. When investors purchase equity, they are purchasing direct ownership in the LLC that owns the property, alongside the original owner, through tokens. The owner can decide which percentage to sell (e.g, only 40%), and investors purchase the tokens during an initial offering on Lofty's marketplace. Once the offering is fully funded, the sale closes, and the owner receives the proceeds from the sale (in our example, 40% of the property's value. This implies that the owner retains the remaining equity of 60% in the form of tokens and continues to co-own the property alongside the new investors). Lofty also allows investors to sell their tokens on the secondary market providing high liquidity. All decisions regarding the property are made by the LLC members (the token holders) through a voting system, and voting power is proportional to ownership. Rental income is shared proportionally to ownership percentage (owning 2% of a property generating $3000 of monthly rent earns 60$/month). If the original owner becomes a tenant, the owner pays monthly rent to the LLC, and that becomes the LLC's income. It is then distributed as rental income to all token holders proportionally to their

ownership[11].

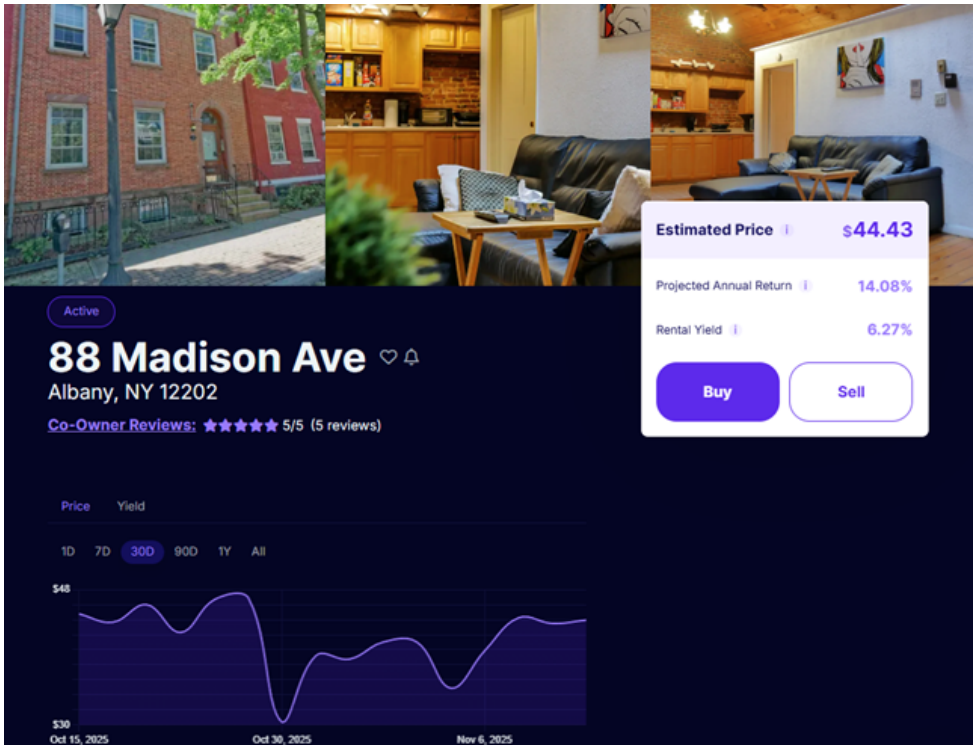

Figure 5: Property listing located in Albany, New York State on Lofty.ai

While Lofty.ai is a marketplace that connects homeowners to investors (B2C), RealtyX is a platform that provides legal and technical tools for existing large scale property owners to tokenize their own assets (B2B). The main objective of RealtyX is to enable an owner of a large commercial or residential building unlock liquidity from that asset. To achieve this, RealtyX works with the owner to place the property deeds into a legal Trust, and a SPDD (Special Purpose Decentralized Division, essentially a DAO[12]) is created for that specific property, to govern the asset. The trust issues governance tokens over Ethereum, called RST, to the SPDD. Each token represents a fractional share of ownership and voting power over that specific property. RealtyX's partners legally structures and offers the RST tokens to accredited investors, that buy up these tokens, owning effectively a piece of the building The investor receives their share of the rental income and can use their RST tokens to vote on decisions for that property. As of September 2025, RealtyX counts 638 users, with rental yields averaging 6.9%.
Reference[6, 13, 26, 16]

[11]The owner-tenant who owns 60% of tokens, would pay the full rent to the LLC, and then immediately receive 60% of that payment back as their share of the rental income.
[12]A decentralized autonomous organization (DAO) is an organizational structure with no central governing body.

2.5 Tokenized Commodities: Gold-Backed Tokens (XAUm and XAUt)

The traditional market for physical gold is characterized by inefficiencies such as limited accessibility (as it comes in stardardized sizes), high transaction costs (including premiums and cost of storage) and illiquidity (slow settlements, geographic frictions). Matrixdock, a financial technology platform that specializes in the tokenization of RWA, launched, in September 2024, the XAUm token, that represents ownership of gold, available on Ethereum and BNB blockchain. Each token is backed by one fine troy ounce of physical gold stored in secure vaults located in Singapore and Hong Kong, audited every six months[13]. Holding XAUm tokens is equivalent to holding an equal amount of withdrawable physical gold, with its value backed by physical reserves, without the physical barriers of the gold market. Investors can purchase XAUm directly from Matrixdock using stablecoins during trading hours, and to redeem, investors can convert their XAUm tokens into stablecoins at market price or exchange tokens for physical gold delivery at the custodian vaults. There is also a secondary market for holders of the XAUm tokens on Pancakeswap and Uniswap. Currently, there are no management fees, and the minting/redemption fee is set at 0.25%.

Compared to some existing gold tokens, XAUm is technically innovative. It is compatible with both ERC-20 and ERC-721 standards—meaning XAUm can be freely traded as a fungible token on-chain, or minted as an NFT representing a specific gold bar as needed [14]. Traditionally gold is mostly used as a store of value, but through XAUm it can be given more active uses. Since the token is deployed on multiple public chain networks, users can use XAUm as a collateral on the BNB chain via KinzaFinance to borrow stablecoins, with an initial LTV ratio set at 70%[15].

Another existing gold token is Tether Gold (XAUt), launched in 2020. It differs from XAUm, as XAUt is available on the Ethereum and Tron network, minting and redemption is available 24/7 (opposed to only during trading hours for XAUm), much higher market cap (sitting at about $1.6B for XAUt compared to$65M for XAUm). XAUt also offers physical delivery of gold bars located in Switzerland.

Reference [3, 6, 15, 22, 23]

[13] The latest publicy released audit report is dated July 2025, and showed 421kgs of gold in the vaults.

[14] Possessing the ERC-721 NFT implies that one is the sole and direct owner of that specific 1-kilogram bar with a unique serial number. Possessing the ERC-20 tokens implies owning a share of the pooled gold inside the vaults.

[15] An LTV ratio of 70% implies that for every dollar of XAUm deposited as collateral, the investor can borrow 70 cents worth of stablecoins.

2.6 Specialized and Alternative Tokenized Products

2.6.1 Mineral and Royalty Rights: Mineral Vault

Mineral Vault is a platform active on the Plume network[16] that lets users invest in mineral and royalty rights linked to oil and gas wells in the United States. These are real properties: land that has oil, gas or other hydrocarbons that are being extracted or ready to be drilled. The token does not represent actual ownership of a piece of land or well, but rather one token represents one equity share in an SPV[17] that holds the rights to royalties and income from wells. The SPV does not own or operate wells and does not own the surface land, rather it holds a portfolio of mineral interest[18]. The owner of the mineral rights (in our case, the SPV, who controls the oil and gas under surface land), grants an oil company a lease, giving it the right to explore and drill for a limited period of time. In exchange, the mineral owner receives an ongoing royalty, which is a fixed percentage of the revenue from any oil or gas actually produced and sold from wells drilled on that land.
Who pays for the drilling? Usually, investors do not bear any operational costs, as those have been already paid up by the drilling company (such as ExxonMobil). However, the mineral interests are subject to property taxes, like normal real estate.
Before anything is paid out to token holders, the SPV pays management fees to Mineral Vault (for sourcing and managing the assets) and property taxes. Distributions of income are monthly and paid in USDC stablecoin, sent directly to the investor's wallet. Tokens can be transacted and traded directly with other whitelisted wallets at any time. Mineral Vault is, as of November 2025, still working on making a Decentralized Exchange for the tokens to enable a secondary market.
Reference [17, 6, 20]

2.6.2 On-Chain Institutional Credit Pools: Maple Finance

Maple Finance is essentially a credit marketplace built on public blockchains where trading firms, market makers and other institutions borrow directly from pools of crypto liquidity. Liquidity comes from DAOs, crypto funds, trad-

[16] Plume is a RWA-focused blockchain, designed as a modular chain in the Ethereum ecosystem.
[17] An SPV is a legal entity created for a limited purpose. In the case of Mineral Vaults, the SPV is a business entity that holds financial interests in the properties and collects royalty payments.
[18] A Mineral Interest is the ownership of the right to exploit, mine or produce all minerals lying beneath the surface of a property. In this case, minerals include all hydrocarbons. Mineral interests include: the right to use as much of the surface as is reasonably necessary to access the minerals, the right to execute any conveyances of mineral rights, the right to receive bonus consideration, the right to receive delay rentals, the right to receive royalty.

ing firms, professional users or anyone who deposit assets into a Maple pool. An investor can choose a specific pool, deposit into it, and receive interests. It launched in 2021 with the idea that most DeFi lending was designed for over-collateralized retail borrowing, while the real action in markets still happens through unsecured or lightly collateralized credit between institutions. On Maple, capital sits in themed lending pools—usually denominated in USDC or large-cap assets and each pool is run by a "delegate", typically a specialist credit manager or trading firm. That delegate sources borrowers, does the credit work off-chain, negotiates terms, and then uses smart contracts to actually issue and manage the loans. So, the delegate decides which firms to lend to and on what terms, and the money is spread across many loans inside that pool. Instead of having exposure to a single borrower, the investor is exposed to a portfolio of loans.

Over time the platform has grown into a mix of strategies rather than one monolithic product. Some pools look like classic crypto credit, lending to trading firms against digital-asset collateral; others are closer to cash-management products, parking stablecoins in short-term U.S. Treasury strategies so treasuries, DAOs and funds can earn yield on idle USDC with transparent, on-chain reporting. Maple has run pools on both Ethereum and Solana and has been explicit about targeting "on-chain treasuries" and other professional allocators, not just retail depositors hunting yield.

The economics of the system are shared between three groups: lenders, pool delegates and the protocol. Borrowers pay interest and fees into the pool; a slice goes to the delegate for doing the underwriting and monitoring work, a slice funds protocol revenues, and the rest flows through to lenders as yield. Governance and fee sharing are tied to Maple's native token, SYRUP, which replaced the original MPL token; holders can stake it to take part in protocol decisions and earn a share of revenues generated across pools. The net result is something that looks, economically, like an institutional loan book, but with positions, terms and pool performance visible on-chain in near real time. *Reference* [2, 14, 6]

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