

What Are Real World Assets (RWAs)?

Putting Treasury bills, property and private credit on a blockchain — what the token actually entitles you to, which assets suit it, and the question that decides whether any of it works.

Alain AI Lab Research · Published July 29, 2026 · 10 min read

Real-world assets, in crypto usage, are conventional financial or physical assets represented as tokens on a blockchain — government bonds, money-market funds, private credit, property, commodities, equities. The category has grown from an experiment into one of the most substantial and institutionally serious areas in the sector, and it is genuinely important. It is also the area where the gap between what a token appears to be and what it legally is opens widest, and understanding that gap is the whole of the analysis. This report is about the structure beneath the tokens rather than the market around them.

AT A GLANCE

WHAT IT IS

Conventional assets, tokenised

YOU HOLD

A claim — not the asset

DOMINANT CATEGORY

Short-term government debt

WORKS BEST WHEN

The asset is liquid and priced

KEY QUESTION

What happens if the issuer fails

REINTRODUCES

The intermediaries crypto removed

01

You do not own the asset

Start with the correction that governs everything else. Buying a token representing a Treasury bill does not make you the owner of a Treasury bill. It makes you the holder of a token issued by an entity, which represents a claim against that entity, which in turn holds the bill or a share in a fund that does. The blockchain records who holds the token. It does

not and cannot record who owns the underlying asset — that is recorded in the conventional systems where such things have always been recorded.

This distinction is not pedantry. A bitcoin held in your own wallet is a bearer asset: your key is the ownership, and no institution's cooperation is required. A tokenised bond is the opposite: the token is a convenient record of a claim whose enforcement depends entirely on a legal entity, in a jurisdiction, honouring an obligation. Everything attractive about tokenisation is real, and none of it changes that dependency. If you take one idea from this report, make it that the token is the wrapper and the legal structure is the product.

02

The layers underneath

A typical arrangement has more moving parts than the marketing suggests. At the base sits the asset itself. Above it sits a legal vehicle — a fund, trust, or special purpose company — that actually owns the asset and is subject to some jurisdiction's law. Above that sits an issuer that creates tokens representing interests in that vehicle. And somewhere alongside sits a custodian holding the asset, an administrator valuing it, and frequently a transfer agent maintaining the official register.

Each layer is a party you are trusting and a place a failure can occur. This is why serious evaluation of an RWA product looks much more like assessing a fund than assessing a token: the questions are who the sponsor is, what the vehicle's governing documents say, which jurisdiction's courts would hear a dispute, who holds the assets, and what happens to your claim if any of those parties fails. Blockchain analysis tells you almost nothing useful here, because the risk does not live on the chain.

03

Why government debt dominates

The category is overwhelmingly concentrated in short-term government debt and money-market funds, and the reason reveals what tokenisation is actually good at. Such instruments have three properties that make them ideal: their value is unambiguous and continuously observable, they are highly liquid so redemptions can be met, and the legal structures for holding them through funds are mature and well-tested.

Tokenising them therefore adds convenience without introducing much ambiguity. It also arrived at a moment when a large pool of on-chain capital — stablecoin balances earning

nothing for their holders — wanted access to a safe yield, which is precisely the demand tokenised Treasury products serve. That connection is worth noticing: much of the RWA market exists because of a feature of stablecoin economics, namely that issuers keep the reserve income, as our note on [how stablecoin issuers make money](#) explains. Tokenised Treasuries are, in large part, the market's workaround for that.

Beyond that core, the category extends into private credit, real estate, commodities and company shares, each with its own structure and difficulties — equities in particular raise questions of voting rights and dividend entitlement that a token does not automatically answer, which our note on [tokenised stocks](#) examines. A useful way to read the market is that suitability declines as you move away from assets that are liquid, uniformly priced, and already held through mature fund structures. The current composition of the market, its scale and the institutions building it are mapped in our report on [RWA tokenisation](#); what follows here concerns what any of these instruments is, structurally, whatever asset sits inside it.

Tokenisation makes an asset easier to move, divide and settle. It does nothing whatever to make the asset better, the valuation more honest, or the legal claim more enforceable — and those were always the hard parts.

04

Where it gets difficult

Move away from liquid, transparently priced assets and the problems multiply. Property, private credit, fine art and similar assets present three difficulties that tokenisation does not solve and sometimes obscures.

The first is *valuation*. A token trades continuously, but the building or loan book behind it is valued periodically by an appraiser or administrator, using judgement. The on-chain price is therefore anchored to an off-chain opinion updated infrequently, and the token can trade at prices reflecting sentiment rather than any fresh information about the asset. The second is *verification*: nothing on the chain can confirm that a property exists, is unencumbered, or is insured — someone must attest to that, and you are trusting them. The third is *enforcement*: if the underlying loan defaults or the tenant stops paying, recovering value means legal process in a jurisdiction, conducted by an entity, on a timescale measured in months or years. A token can be sold in seconds; the asset behind it cannot.

The question that decides everything

Ask this of any RWA product before anything else: *if the issuer fails tomorrow, what do I actually have?* The range of possible answers is wide and the difference between them is the difference between a sound instrument and a bad one.

In the strongest structures, the assets sit in a bankruptcy-remote vehicle, legally separated from the issuer's own balance sheet, with token holders holding a recognised beneficial interest and a documented process for claiming it. In the weakest, the token is an unsecured promise from an operating company, and if it fails you are a general creditor in a queue, holding a token nobody is obliged to honour. Both look identical in a wallet. The only way to distinguish them is reading the legal documentation — the offering memorandum, the trust deed, the terms of issuance — which is exactly the unglamorous work the token format tempts people to skip. A product that cannot answer this question clearly and in writing has answered it.

What tokenisation genuinely improves

Having been sceptical, it is important to be fair, because the benefits are real and several are substantial. *Settlement* is transformed: transfers that take days through conventional infrastructure settle in seconds, continuously, without the reconciliation layers described in [how crypto settlement works](#). *Fractionalisation* lowers minimums, letting instruments previously restricted to institutions be held in small denominations.

Availability extends to all hours, which matters for an asset otherwise trapped behind market open. And *composability* is the genuinely novel property: a tokenised Treasury fund can be posted as collateral in a lending protocol or held by another on-chain system automatically, which is simply not possible with a conventional fund holding. That last capability is why sophisticated on-chain systems have adopted these instruments so quickly — including, as covered in [fiat-backed versus crypto-backed stablecoins](#), protocols that now hold tokenised government debt as a large share of their collateral.

The liquidity illusion

One benefit is frequently overstated and deserves separating out. Tokenisation is said to make illiquid assets liquid, and this is mostly wishful. A token can be transferred instantly; that is not the same as there being someone willing to buy it at a fair price. Liquidity is a function of the number of interested participants and the capital they bring, not of the format the ownership record takes.

In practice, tokenised versions of illiquid assets frequently trade thinly, at wide spreads, in markets where a modest order moves the price sharply — the ordinary consequences described in [market liquidity](#). Worse, a thin market can produce a price that appears to mark your holding continuously while reflecting almost no genuine trading, which is arguably less informative than a quarterly appraisal because it looks precise. Tokenisation removes some barriers to trading; it does not manufacture demand, and demand is what liquidity is made of.

08

How to evaluate one

Six questions, in order. What is the underlying asset, and would you want to own it in conventional form? What legal vehicle holds it, in which jurisdiction, and is it bankruptcy-remote from the issuer? What does the token legally entitle you to, in writing? Who values the asset, how often, and by what method? Can you redeem — and if so, on what terms and timescale, or are you dependent on selling into a secondary market? And who is regulated here, and by whom, since many of these instruments are securities and are restricted accordingly.

The closing perspective is that this is the most institutionally credible development in crypto and simultaneously the one where crypto's own tools help least. Every dependency the technology was designed to remove — issuers, custodians, administrators, courts, jurisdictions — reappears here by necessity, because the asset exists in the world and the world has institutions. That is not a criticism; it is what makes the category serious. But it means an RWA investment should be assessed with the tools of conventional finance, and that anyone who buys one because the process felt like buying a token has skipped the only analysis that mattered.

“And I subscribed the evidence, and sealed it, and took witnesses, and weighed him the money in the balances.”

JEREMIAH 32:10

Methodology & Sources

This report explains a category and how to assess it; it deliberately contains no market size figures, growth rates, protocol names, issuer names, asset-class proportions, or projections, all of which change continuously and are covered in our separate market-mapping coverage — consult current data and specific product documentation before acting. The structural description — that a tokenised real-world asset typically involves the asset itself, a legal vehicle such as a fund, trust or special purpose company that owns it, an issuer creating tokens representing interests in that vehicle, and separate custody, administration and transfer-agency functions — reflects standard arrangements; specific structures vary materially and must be read individually. The observation that token holders hold a claim enforceable through legal process rather than direct ownership of the underlying asset is a general characterisation of these structures, not a statement about any particular product; some structures confer stronger beneficial interests than others, and bankruptcy-remoteness varies. The concentration of the category in short-term government debt and money-market instruments, and the attribution of much of that demand to on-chain capital seeking yield unavailable on stablecoin balances, reflect widely reported market composition. Valuation, verification and enforcement difficulties described for illiquid asset classes are general characteristics of those assets rather than defects of tokenisation. Many tokenised real-world assets are securities and access is restricted by jurisdiction and investor classification. Nothing here is a recommendation regarding any token, product, issuer, or trade, and nothing here is legal, tax or investment advice.