# What Is Tokenized Gold?

*Bullion in a vault, ownership on a chain — the fee structure that inverts the usual maths, and why "redeemable for physical gold" means something different than you think.*

Alain AI Lab Research · Published July 30, 2026 · 10 min read

Tokenized gold is the quietest success in the real-world asset market. Each token represents a specific quantity of gold held in a professional vault, and it transfers on a blockchain like any other token — combining an asset people have trusted for millennia with settlement that takes seconds. Unlike most of this category it has genuinely worked, at meaningful scale, without a significant failure. It also carries two structural features that almost every explanation gets wrong: an unusual fee arrangement that reverses the normal comparison with funds, and a redemption right that is real but effectively unavailable to you. This report covers both. It assumes you know what real-world assets are.

**AT A GLANCE**

| ONE TOKEN | BACKED BY | UNUSUAL FEATURE |
|---|---|---|
| **One fine troy ounce, typically** | **Allocated bars in vaults** | **No annual storage fee** |
| **COST SITS AT** | **PHYSICAL REDEMPTION** | **TRACK RECORD** |
| **Entry and exit instead** | **Real, but a bar-sized minimum** | **The category's cleanest** |

01

## What one token is

The dominant products define a token as one fine troy ounce of gold, held in professional vaults in established bullion centres. Crucially the metal is *allocated* rather than pooled: specific bars, identified by serial number, refiner and weight, are held against the tokens rather than the issuer simply owing you an ounce from a general pile. In several products the individual bars backing your holding can be looked up.

That distinction matters more than it sounds. Unallocated gold — the form most bank gold accounts take — makes you an unsecured creditor of the institution, so a failure puts you in a queue with everyone else. Allocated gold is your property, held for you, and should be recoverable in an insolvency rather than absorbed into the estate. Tokenized gold products have generally chosen the allocated form, which is the single most important design decision in the category and the main reason its record is better than others in this market.

02

## The fee inversion

Here is the economic feature almost nobody explains properly. A gold exchange-traded fund charges an annual management fee, typically a small fraction of a percent, deducted continuously — so the quantity of gold behind each share slowly declines for as long as you hold it. The leading tokenized products charge no recurring storage fee at all. Instead they charge a fee when tokens are created and redeemed, and the transfer itself costs only network fees.

That inverts the usual comparison in a way with a genuine crossover point. For a short holding period the fund wins, because you pay almost nothing to enter and exit and the annual charge has little time to accumulate. For a long holding period the token wins, because the entry cost is paid once and then nothing accrues, while the fund's fee compounds year after year. Creation fees on the tokenized products also tend to scale down with size, so larger purchases cross over sooner. Anyone choosing between them should do the arithmetic for their own expected holding period rather than comparing a headline expense ratio against a headline creation fee, which are not the same kind of number.

03

## Redemption is real and not for you

Every serious product in this category allows tokens to be exchanged for physical metal, and that right is genuine — it is what anchors the token to the bullion price. It is also, for practical purposes, unavailable to almost every holder.

The reason is the gold market's own conventions. Professional bullion trades in large bars, and the redemption minimums on the leading tokens are set near a full bar — on the order of several hundred ounces. At recent prices that is a seven-figure sum before delivery, insurance and handling costs. So the honest description is that physical redemption exists as an institutional arbitrage mechanism rather than a consumer feature: large participants can redeem, and their ability to do so is what keeps the token trading near spot, exactly as authorised participants keep a fund near its net asset value. For everyone else the practical exit is selling the token on the market. That is a perfectly reasonable arrangement, and it is not what "backed by gold you can redeem" implies to most readers.

> *The redemption right is doing real work — it is the reason the token tracks the metal. It is simply doing that work for someone else, at a size you will never transact, which is the same arrangement that holds a stablecoin at a dollar.*

04

## Custody and verification

The gold sits with established vault operators in recognised bullion centres, and the two largest products differ in ways worth noting. One publishes attestations monthly, prepared by a major international accounting firm, against vaults in London. The other publishes quarterly, through a different firm, against vaults in Switzerland. Both publish the tokens outstanding and confirm matching ounces held.

Two observations follow. More frequent attestation is genuinely more informative, and the monthly-versus-quarterly split mirrors the disclosure difference between the two largest stablecoins examined in USDT vs USDC — unsurprisingly, since one of the same issuers is involved. And an attestation remains a point-in-time report on specified facts rather than a full audit, a distinction set out in reading an issuer's reserves. What tokenized gold has that most reserve-backed instruments lack is a physical inventory that can in principle be counted and, in several products, bar lists that a holder can inspect directly.

05

## How it actually tracks

In practice these tokens trade very close to the spot gold price, which is the strongest evidence that the structure works. Small deviations do appear in both directions, and the causes are ordinary rather than alarming: the entry and exit fees create a natural band around spot, and because the tokens trade on crypto venues, their price also reflects the depth and sentiment of those venues rather than the bullion market alone.

The consequence is that liquidity conditions in crypto markets can push a gold token slightly away from the metal for a period — a small premium when demand for on-chain gold exposure is strong, a small discount when crypto markets are stressed and holders are selling whatever they can. Anyone using these instruments should check the token's price against spot before transacting rather than assuming they are identical, and treat a persistent, meaningful gap as a question rather than an opportunity.

06

## Against the alternatives

Compared with a *gold ETF*, the token gives up regulatory oversight, investor-compensation protections through a regulated broker, and the deep continuous liquidity of a listed fund. It gains continuous availability, self-custody, transfer to anyone without an intermediary, usability inside on-chain systems, and the fee structure discussed above. For a long-horizon holder who values those properties, that is a real trade rather than a worse product.

Compared with *physical bullion* the token is dramatically cheaper and easier. Buying coins or small bars typically means paying a dealer premium well above spot, then paying to store and insure them, then selling back at a discount — costs that dwarf anything in the tokenized products. Against *futures*, the token has no expiry, no roll cost and no margin requirement, at the cost of the leverage and institutional-grade liquidity futures provide. The pattern across all three: tokenized gold is a good instrument for holding metal and a poor one for trading it, which is the opposite of how it is usually marketed.

07

## Who actually uses it

Three constituencies explain the demand. The first is *on-chain* users who want a non-dollar store of value that stays inside the crypto system — usable as collateral, held in a treasury, or deployed in protocols without leaving the chain, in a way no fund share can be. The second is *emerging-market* holders in countries with currency instability or capital controls, for whom gold is a culturally established store of value and a token reachable from a phone is far easier than a vault relationship or an offshore brokerage account.

The third, increasingly, is anyone wanting gold exposure outside banking hours: the metal's own market has closing times and settlement cycles, while the token does not, and the settlement finality described in crypto settlement applies here as elsewhere. The category has grown into a genuinely large market by trading volume — on some measures second only to the largest gold ETF — while remaining overwhelmingly concentrated in two products, which is itself a risk worth naming.

08

## What to check

Six questions. What does one token represent, precisely, and is the backing *allocated* to identified bars rather than pooled? Where are the vaults, who operates them, and is the metal insured? Who attests, how often, and can you inspect a bar list? What are the full costs — creation, redemption, and any spread on the platform you are buying through, which is frequently larger than the issuer's own fee? What is the redemption minimum, so you know whether that right applies to you? And can the issuer freeze tokens, since these are centrally issued instruments with the same control properties discussed in crypto custody?

The closing assessment is more positive than most of this cluster deserves. Tokenized gold works because it tokenizes something uniquely suited to it: a homogeneous, fungible commodity with a transparent global price, mature vaulting infrastructure, and centuries of established practice for allocated storage. It has no tenants, no leaking roof, no valuation judgement and no cash flows to distribute. The risks that remain are real but ordinary — issuer, custodian, jurisdiction and concentration — and they are the risks of holding gold through an intermediary, which is what almost everyone who owns gold already does. Judged as a convenient wrapper for bullion rather than as a crypto investment, it is the category's most convincing product.

*"The fining pot is for silver, and the furnace for gold: but the LORD trieth the hearts."*

PROVERBS 17:3

## Methodology & Sources

This report explains a product category as at the date of publication; it deliberately contains no product names, issuer names, market capitalisations, precise fee percentages, redemption minimums, or price figures — all of these vary by product and change continuously, and readers should consult current issuer documentation before acting. Structural claims reflect publicly documented arrangements across the leading products: a token typically represents one fine troy ounce; backing is allocated to specific identified bars rather than held as an unallocated pooled claim; metal is held with established vault operators in recognised bullion centres including London and Switzerland; issuers publish periodic third-party attestations, with the leading products differing in cadence between monthly and quarterly; and physical redemption is available subject to minimums set near standard bar sizes, which places it beyond the reach of typical retail holders. The fee comparison — recurring annual expense ratios on physically backed gold funds versus one-off creation and redemption fees with no ongoing storage charge on the leading tokens — is directional and reflects published fee schedules; the crossover point depends on holding period, transaction size and the specific products compared, and readers should perform their own calculation. Statements about tracking to spot, and about occasional small premiums or discounts arising from crypto-venue liquidity conditions, are directional characterisations. Market share is described as overwhelmingly concentrated in two products; published concentration figures vary between sources and no precise share is asserted. An attestation is a point-in-time report on specified facts and is not a full financial audit. Nothing here is a recommendation regarding any token, issuer, fund or transaction, and nothing here is investment advice.