

A SERIES FOR INVESTMENT FUND PROFESSIONALS

Demystifying Tokenisation

Parts 1 to 6

Who keeps the register, and which register counts?

Fund register

on-chain

ADDRESS	TOKENS
0x4f2a...c81d	1,000
0x9c1e...07b3	500
0x7b3d...e5a9	250

✓ Source of truth

Sébastien Schmitt

October 2026

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Why this series

Tokenisation is on every agenda in asset management. Yet in most of my meetings, the same basic questions come back. What is a token, really? What changes compared with a traditional fund share? And what does it mean for the transfer agent, the depositary, the distributor and the management company?

I started this series to answer these questions in plain language, for people who work with investment funds and not for developers. The six parts collected here were first published on LinkedIn between July and September 2026. I have kept them as they were written. Only the links between the parts were adjusted, so that they read as one text.

One question runs through all six parts: who keeps the register, and which register counts? If you keep only one thing from this booklet, keep this one.

The opinions are mine, and mine alone. The series continues on LinkedIn.

Sébastien Schmitt

October 2026

BEFORE YOU START

This series is deliberately an exercise in simplification, designed to equip asset management professionals with the basic concepts of tokenisation. It does not cover every type of financial asset. The scope is limited to investment funds, with the Luxembourg SICAV as the reference case, and a number of legal and technical nuances are left aside for the sake of clarity.

Each part shows the date of its first publication. The figures and the news it mentions are those available at that date. They have not been updated, and in this field they move fast.

From the Blockchain Ledger to the Investment Fund Register

First published on LinkedIn · July 2026

Tokenisation is on every asset manager's lips. Yet behind expressions like "on-chain", "wallet" or "distributed ledger", one essential question often goes unanswered: what actually changes compared with a traditional fund share?

To understand it, we need to go back to a principle far more familiar than it seems: ownership of a financial asset often depends less on a document than on an entry in a register.

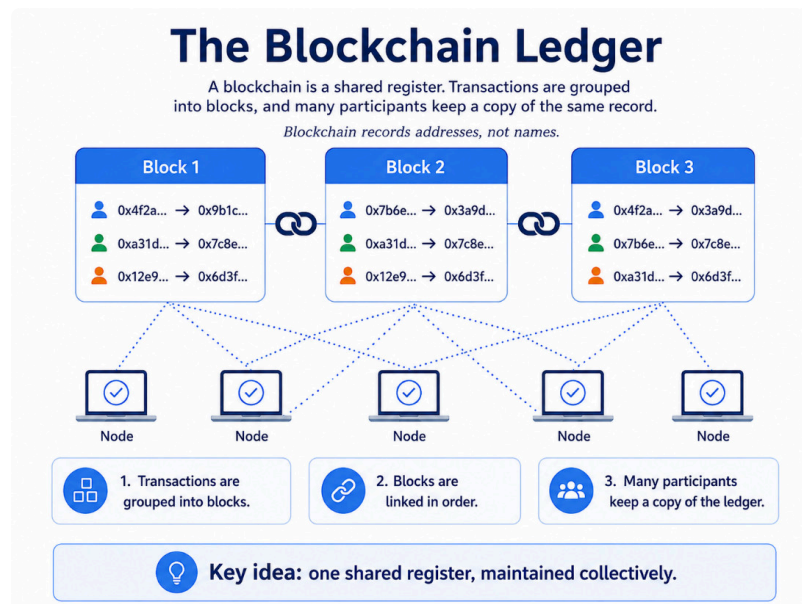
In this first article, I will compare how a token works on a blockchain with the three main forms in which fund shares are represented in Luxembourg: registered, bearer and dematerialised.

When we talk about the tokenisation of "RWA" (Real World Assets), we are talking about representing assets, in particular financial instruments, on a blockchain infrastructure. Although this is neither about crypto nor about investing in bitcoin, it is important to explain the mechanisms underlying blockchain in order to understand how this infrastructure can benefit traditional finance, and investment funds in particular.

Blockchain in two concepts

What is a blockchain? In schematic and very simplified terms, a blockchain is a decentralised ledger. This ledger is not maintained by a central entity: it is replicated across a multitude of computers (called "nodes"), each of which holds a copy. Transactions are grouped into blocks, and every new block is validated through a consensus mechanism. Blockchain, translated literally, is a chain of blocks. Each block contains time-stamped transactions, and it is the chain as a whole that makes it possible to reconstruct who holds what.

The second important concept is the notion of "wallet". I must admit this term is misleading, and even today, in the crypto world, many people get it wrong.



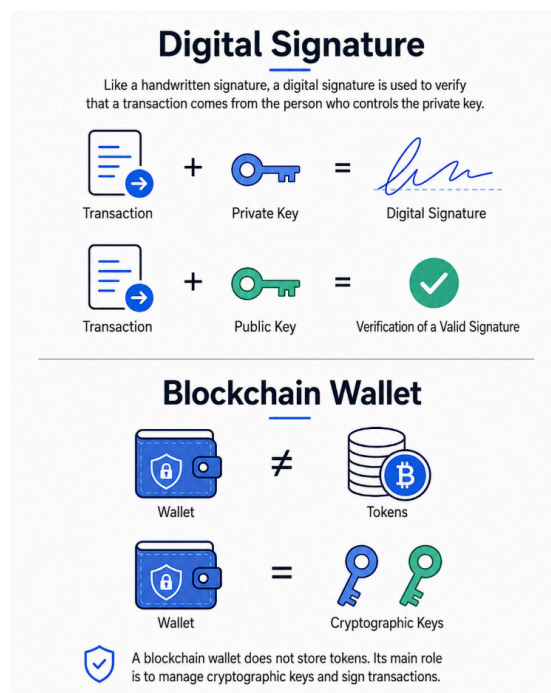
A wallet is a program that allows you to communicate and interact with the blockchain. Contrary to what its name suggests, a wallet holds no tokens or coins. A wallet manages one or more blockchain addresses and the cryptographic keys used to sign transactions. The private key is used to sign transactions: it is what proves you control the tokens. The public key allows anyone to verify that a signature is authentic, without ever revealing the private key. Note that neither of them reveals your identity. The blockchain knows who controls what, not who you are.

Careful: a private key is not just a password. A password can be reset. A private key cannot. Whoever holds it controls the assets. Whoever loses it has no recourse. Hence the famous adage: "Not your keys, not your coins".

Put simply, a wallet is a digital keyring. It manages the key that allows you to control and transfer the tokens associated with your address.

When I look at my wallet on my Ledger, for example, I see that I have 10 tokens on blockchain X. I do not physically hold those 10 tokens on my wallet, but my wallet allows me to prove that I control the address those tokens are associated with.

On this decentralised ledger, it is recorded that these tokens are associated with my address. My wallet allows me to exercise control over them and to transfer them.



To sum up, the blockchain is a single ledger, but one held and maintained by a multitude of participants who collectively guarantee its validity.

Keep these two ideas in mind: the register is what counts, and the key is what controls.

The three forms of fund shares

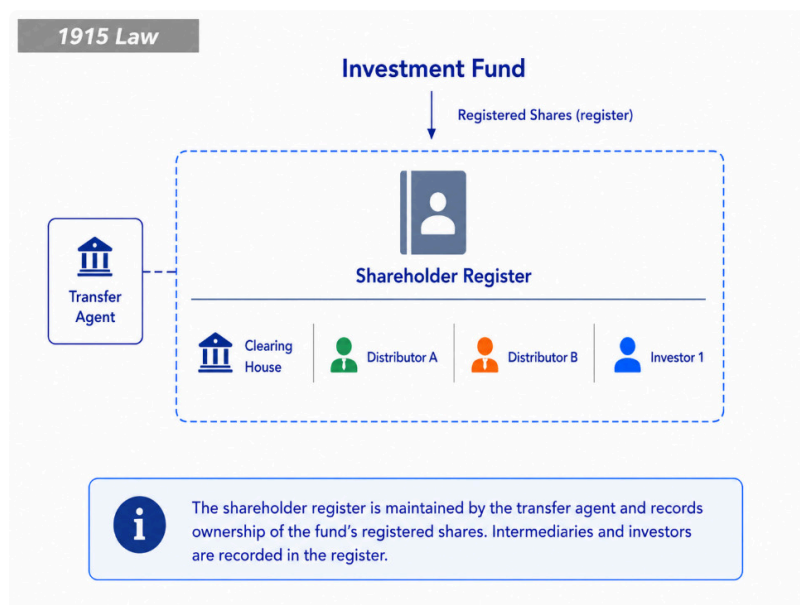
Now let's look at how a share in an investment fund works. I will limit the analysis to Luxembourg and, for simplicity, to the SICAV: a company that invests in the markets and whose shareholders are the investors, each holding a share of that company. A SICAV legally issues shares; for simplicity, I will use "share" and "unit" interchangeably here.

In Luxembourg, securities can take three forms: registered shares, bearer shares and dematerialised shares.

1. The registered share: ownership through the register

Let's start with the first: the registered share, the most common form in Luxembourg funds. As the 1915 law puts it, "ownership of registered shares is established by an entry in the register". This register, maintained by a regulated actor, the transfer agent, contains the precise designation of each shareholder, the number of shares held, the payments made and, where applicable, any transfer or conversion into bearer or dematerialised form.

What does this have in common with the blockchain? As with the blockchain, the investor does not, strictly speaking, hold a share on their account, but only the confirmation that they are entered in a register. Holding a registered share means being entered in a register. Nothing more, nothing less. To transfer a share, you hand nothing to anyone: you instruct the TA, which verifies the operation and amends the entry. And this is where the fundamental difference with the blockchain appears: the register of an investment fund is maintained by a single entity (the TA), and its reliability therefore rests on a central actor that is legally designated, regulated and subject to controls.



2. The bearer share: ownership through possession

Now for bearer shares. Historically, bearer shares worked in the opposite way. The physical certificate itself was the security, and whoever held it was considered the owner. It could be transferred hand to hand, without an intermediary and without a register of holders.

Because of the anonymity this created, Luxembourg required bearer shares to be immobilised with a depositary, which now maintains a register of holders. Bearer shares have therefore lost most of what originally defined them and have largely fallen into disuse.

Their real similarity with a token was the possibility of direct peer-to-peer transfer. The fundamental difference was that the bearer share existed without a register, whereas the token exists only through a register.



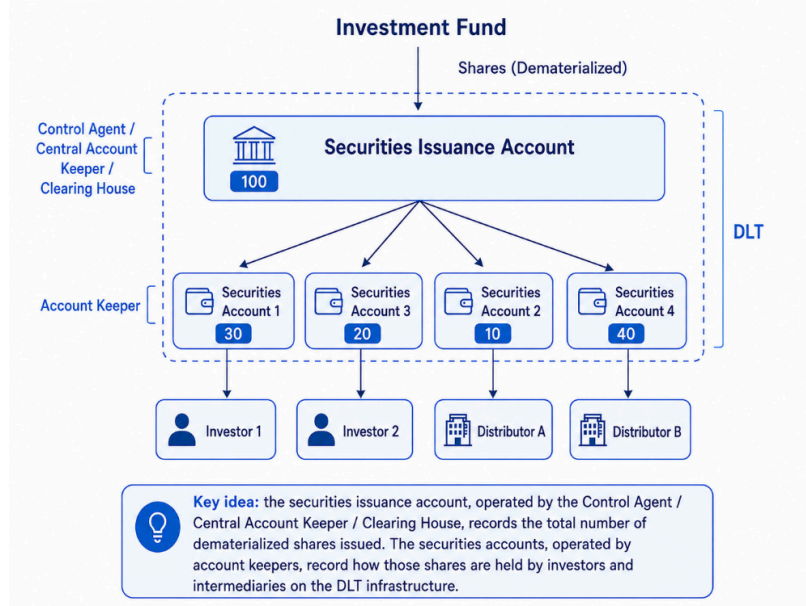
3. The dematerialised share: ownership through book entry

Dematerialised shares are represented exclusively by entries in securities accounts. A securities issuance account records the total number of shares issued, while securities accounts record how those shares are held by investors and intermediaries.

Blockchain Law IV made it possible to operate these accounts using DLT and introduced the role of the control agent. However, investors do not hold these shares directly in their own wallet: the accounts remain operated by regulated intermediaries.

There is no longer a shareholder register: it is the entry in the securities account that establishes ownership.

The novelty is real: the Blockchain Law explicitly recognises the use of blockchain to issue and transfer these securities. But the parallel with the blockchain world stops there. It is impossible to make this entry on your own wallet and dispose of your security freely: everything passes, once again, through a regulated third party.



Conclusion: so, what does a token look like?

Let's recap what we know about the token. It does not exist outside the blockchain. It does not circulate physically. Transferring it means changing the state of the ledger. For a purely native asset, that entry directly determines who controls it.

Does that remind you of anything? It is precisely the principle of the registered share. Structurally, a token is a constitutive entry in a register, nothing more, nothing less. This is a parallel in how they work, not a legal equivalence.

The parallel with the bearer share, often put forward in the crypto world, actually holds on one point: the transfer. Like the historical bearer security, a token can be transferred directly peer to peer, between two addresses, without an intermediary or prior authorisation.

However, the bearer security rested precisely on the absence of a register: the paper was the title. The token, by contrast, exists only through its entry on the blockchain. The token is the register in its purest form.

That leaves two major differences with the registered share, and they are fundamental.

The first: the blockchain ledger records no names, only addresses. It knows who controls what, not who you are. Yet the entire legal and anti-money-laundering function of the shareholder register rests precisely on that link between an identity and a position.

The second: no single actor keeps this ledger. With registered shares, you instruct the TA, which verifies and then records. On a public blockchain, the holder initiates the transfer themselves by signing a transaction. The network then verifies that transaction and collectively updates the ledger according to the rules of the protocol. No actor alone has the power to record or refuse the operation. The TA is not replaced by another central entity. Its central recording function is replaced by rules applied collectively by the network.

In terms of register architecture, a native token therefore looks much more like a registered share than a bearer share: it is constituted by an entry, and that entry is tied to an address, not an identity.

But in terms of control, it behaves like the historical bearer share: whoever holds the private key controls the asset, and losing the key means losing the asset, with no recourse.

A native token is, in essence, a hybrid: the register architecture of a registered share, combined with the control regime of a bearer instrument. This is exactly where the two ideas from the beginning meet: the register is what counts, and the key is what controls.

As for the dematerialised share, its closest parallel is not the token itself, but the token held with a regulated intermediary: there, you find the book entry, the intermediaries and the link to an identity.

Tokenising a fund is therefore not about turning shares into crypto. It is about bringing to the blockchain the two elements it lacks to become a regulated fund register: identities and someone responsible.

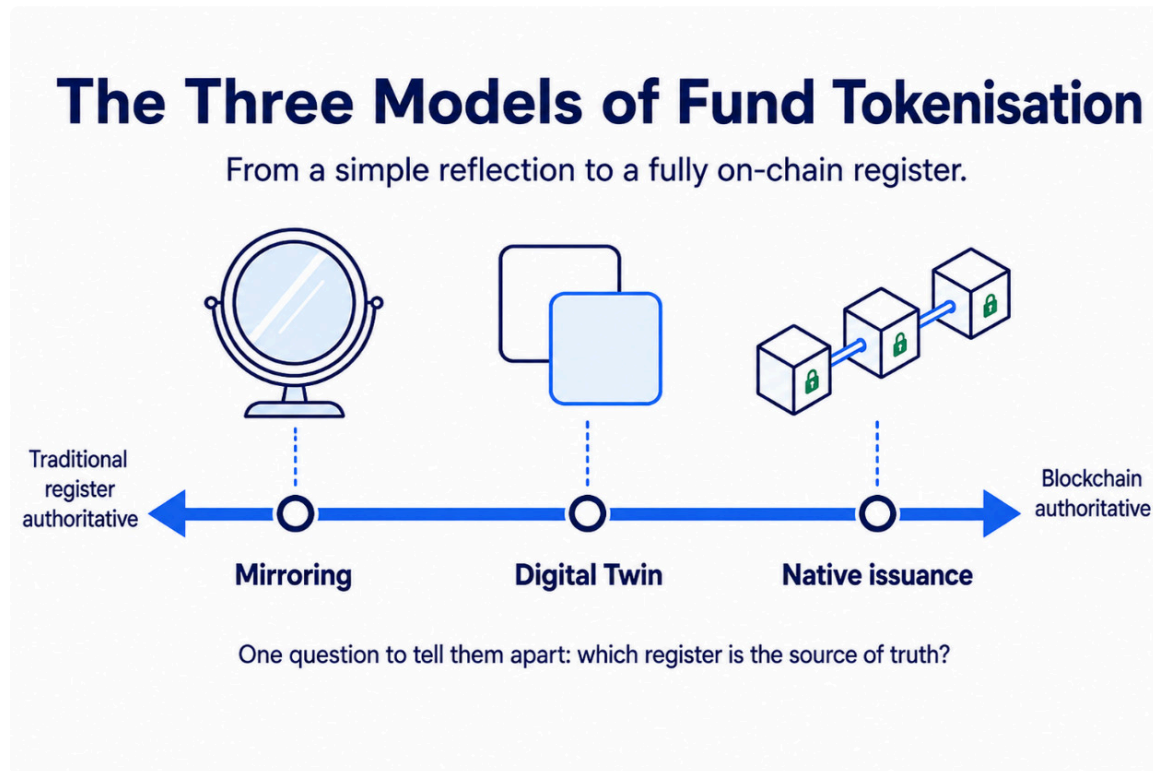
Here are the four models side by side:

	Registered share	Bearer share (historical)	Dematerialised share	Native token
What determines who holds it?	The entry in the register	Possession of the physical certificate	The entry in a securities account	The entry on the blockchain, controlled by the private key
Who keeps the register	A single regulated actor: the TA	No one: no register of holders	Account keepers, under the supervision of a central account keeper or a control agent	No single actor: the network maintains it collectively.
Does the register know your identity?	Yes: name and precise designation of each investor	No: the holder was not recorded	Yes: through the chain of intermediaries	No: addresses, not names
How transfers work	Instruction to the TA, which verifies then amends the entry	Hand to hand, no intermediary	Account to account, through intermediaries	Peer to peer, by signing with the private key

I hope I have managed to clarify the basic concepts of both worlds. Part 2 tackles a topic that seems simple at first sight but is in reality far more complex and subtle: the different models of tokenisation.

The Different Models of Tokenisation

First published on LinkedIn · 28 July 2026



After covering, in Part 1, the basic principles of blockchain and how they compare with the traditional fund world, we will now walk through the different models of fund tokenisation.

This matters, because behind the single concept of tokenisation lie several distinct models, which differ both in scope and in operational impact, for investors and market players alike.

We will first look at the three main models: mirroring, digital twins and so-called native issuance. This typology is not mine: it comes from the report *Operationalising Tokenised Funds*, published in November 2025 by Project Guardian, the initiative led by the Singapore regulator, MAS, together with major global asset managers.

We will then see that the boundary between these models is the subject of debate, and why. Finally, I will share my own view on what distinguishes a native issuance from the others, bearing in mind that there is not yet a common position in the market.

Remember the framework from Part 1: the register is what counts. To tell the tokenisation models apart, the central question remains the same: how is the register of the tokenised fund maintained, and which register is the source of truth?

The three basic models

1. Mirroring: the blockchain as a reflection

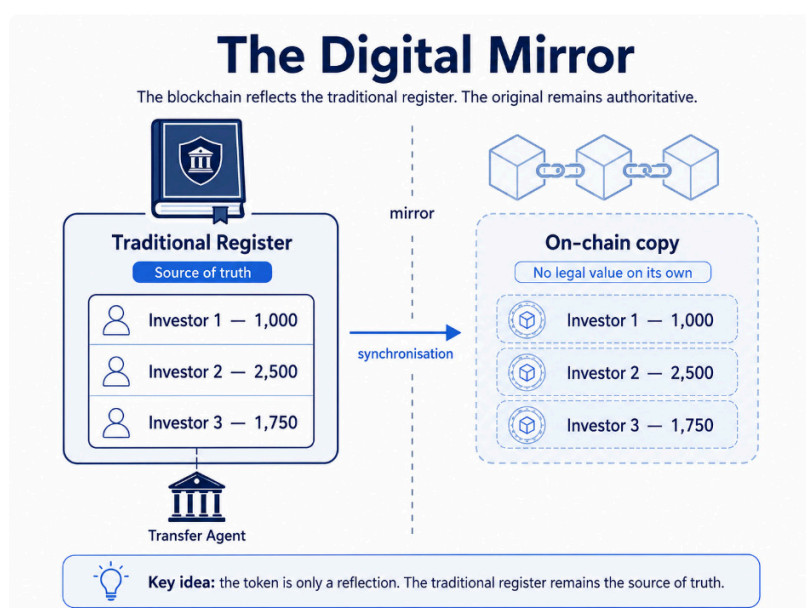
Let's start with the simplest and oldest model: mirroring, the Digital Mirror in the Guardian report's terminology. Here, part or all of the traditional register is reflected, as in a mirror, onto the blockchain.

But the authoritative record, both operationally and legally, remains the traditional, off-chain register. The tokenised registered share is ultimately nothing more than a digital copy, on the blockchain, of the classic registered share. This mirror share does not even necessarily carry all the rights of the traditional one.

To put it simply: an additional layer, the blockchain, is added on top of the classic process. And what about the TA? Nothing changes: it keeps the register, exactly as before.

I used the word 'oldest' because the first tokenisation projects, observed around 2017-2018, followed this model. Mainly for distribution and experimentation purposes and, let's not hide it, for marketing reasons.

Looked at from the perspective of the fund's register and its TA, the operational gain is very limited. If anything, an additional layer is added that needs to be maintained and reconciled. This model nevertheless had the merit of enabling the first experiments and proving that the technology works. In a way, it paved the way for the models that followed.



2. Digital twins: tokenisation one step removed

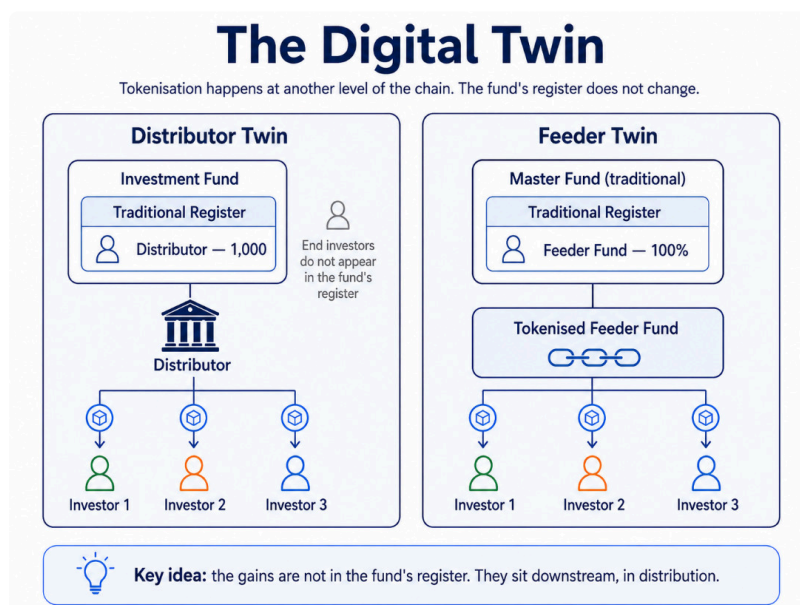
The second model is what is known as the digital twin. Here too, the fund's traditional register remains off-chain, but tokenisation happens indirectly, at another level of the chain. The Guardian report distinguishes two variants.

First variant: the distributor twin. A distributor, recorded in the fund's traditional register, tokenises the shares it holds for the purposes of its own distribution. The end investor does not appear in the fund's register: they hold a token issued by the distributor. For the fund's TA, nothing changes: it sees a single position, that of the distributor.

Second variant, used in particular in alternatives: the feeder twin. A tokenised feeder fund invests in a traditional master fund. In the master's off-chain register, only the feeder appears. The investor does not directly hold a share of the alternative fund, but a share of a fund that invests in another fund. This is today one of the most commonly used approaches in the United States to offer tokenised access to alternative funds, notably in private credit and private equity.

For the fund manager and its TA, here again, no operational gain. But beware of the hasty conclusion: if this model thrives, it is not out of masochism. The gains exist, they simply sit elsewhere in the chain, with the distributor and the end investor: easier access, lower investment amounts and greater transferability. We will come back to this in Part 3.

A passing remark: a tokenised feeder whose own register is kept on-chain is, at its own level, nothing other than a native issuance. The twin is often a native issuance shifted to another level of the chain.



3. Native issuance: the blockchain as the register

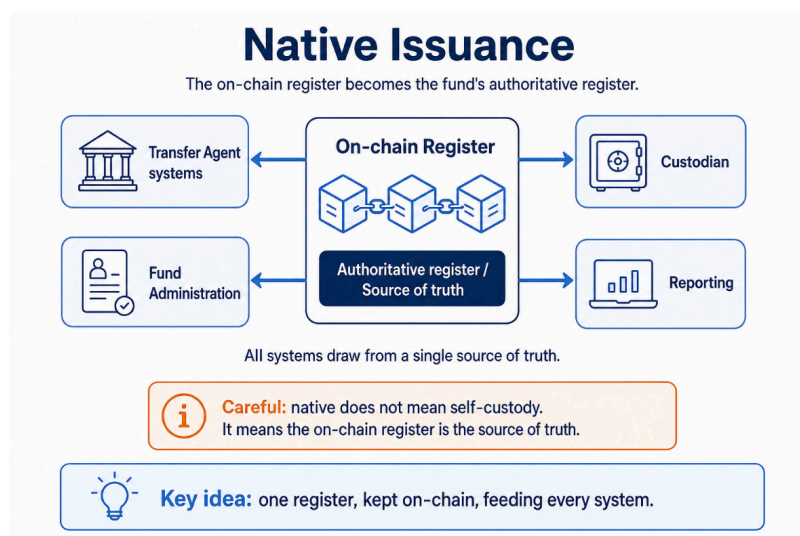
This is the most recent and most ambitious model: the blockchain becomes the fund's authoritative register, both operationally and legally. Share movements (subscriptions, redemptions and transfers) are recorded directly on-chain.

This is where the potential operational gains lie. No more reconciliations in every direction: there is a single source of truth, and the various systems, instead of copying information here and there, all draw from that same source.

Depending on the architecture chosen and the access rights granted, the investor may also be able to consult their position and movements directly on the on-chain register.

One caution: 'native' does not necessarily mean that the investor holds (or rather operates) the share directly in their own wallet. The term means that the on-chain register constitutes the source of truth.

And the TA? This is where its role changes profoundly. The blockchain becomes the source of truth for the register, but that does not mean that all the functions traditionally performed by the TA disappear. We will come back to how they evolve in Part 6, on the value chain.



The debate: where does native begin?

These models appear to have clean, sharp boundaries. In reality, they are the subject of lively debate among practitioners, and the points of friction are numerous: legal, operational, technological. I will focus here on the two that come up most often, both about the line between mirroring and native, which is far from settled. Let me explain what the debate is about, and then give you my view.

To understand it, let's go back to the definition of the register we saw in Part 1. A register contains the transactions, but also the identity of the investors. And as we also saw, the blockchain records only addresses, not identities.

This means an off-chain database containing investors' identities has to be maintained, and a link established between those off-chain identities and the on-chain transactions.

Hence the question: if a key part of the register is not on-chain, is it really a native issuance? Some speak of a hybrid model, others of mirroring, and others still maintain that it is indeed a native issuance.

Second element of debate: existing traditional funds where only one share class is tokenised and lives on-chain. In most of these structures, for reconciliation and reporting purposes, the transactions recorded on-chain for the tokenised class are brought back into the fund's traditional register. For some, as long as the traditional register persists and remains authoritative, we are no longer looking at a native issuance, but at mirroring.

My view

Here is my view. First of all, the blockchain is not meant, in my opinion, to record all the information contained in the register, in particular investors' identities, even in encrypted form. As we saw in Part 1: the principle of the blockchain is to record and validate transactions. Nothing more, nothing less.

I am not denying blockchain's potential on the topic of identity. Quite the opposite: in a world where deepfakes and forgeries will proliferate, I am convinced that part of the answer lies in that truth machine that is the blockchain. But, in my view, it is not a prerequisite for considering an issuance native.

A native issuance therefore consists, as I see it, in leveraging the blockchain infrastructure for what it does well, not in bending it to fit the traditional world. The traditional register itself works this way: a transactional layer on one side, an investor database on the other, and a link between the two. Replacing the transactional layer with the blockchain is therefore enough, in my view, to qualify the issuance as native.

As for an existing fund with a tokenised share class, the only question that matters is the one from Part 1: where is the source of truth? Is it the blockchain, or the traditional register? The answer determines the model: native in the first case, mirroring in the second.

One last case remains, which we have not yet addressed: dematerialised shares under the blockchain laws. It is the clearest one. When the entry in the securities account is made through a record on the blockchain, the answer flows naturally: this is indeed a native issuance.

To sum up, here are the four models side by side:

	Mirroring	Digital Twin (Distributor)	Digital Twin (Feeder)	Native issuance
Who keeps the fund's register?	The TA, off-chain	The TA, off-chain (the distributor keeps its own token layer)	The master's TA, off-chain (only the feeder is tokenised)	The blockchain: the authoritative register is kept on-chain
What is the source of truth?	The traditional register	The traditional register	The master's traditional register	The blockchain
Is the investor in the fund's register?	Yes, the token is only a reflection	No: they hold a token issued by the distributor	No: they hold a share of the feeder	Yes: the investor's position is recorded on-chain
Operational gains	Very limited: an additional layer to maintain and reconcile	None for the fund; gains downstream, in distribution	None for the master; gains in access and transferability	Potentially significant: a single source of truth

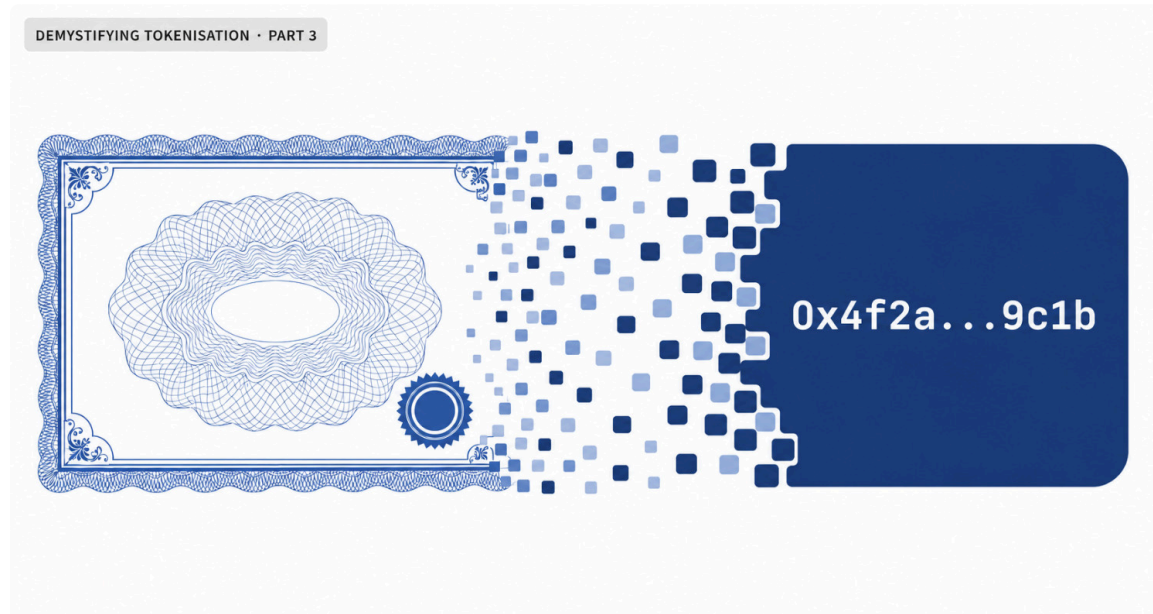
These distinctions matter in practice. When engaging in a tokenisation project with your asset servicer or tech provider, the tokenisation model is a key point to clarify and to challenge: the four models above do not deliver the same benefits, nor the same operating model.

I hope these tokenisation models are now clearer. On where native begins, the debate is open, including in the Luxembourg market.

Part 3 tackles the central question we have already touched upon: why tokenise?

Why Tokenise an Investment Fund?

First published on LinkedIn · 4 August 2026



Part 1 covered the register, Part 2 the models. That leaves the question everyone asks me, the one we have only touched upon so far, and probably the most important of all: why tokenise an investment fund?

One point of framing: I am mainly taking the perspective of fund managers and their investors here. The other players in the value chain have their own dedicated article: Part 6.

The answer rests on two pillars: new demand on the investor side, and potential gains on the operations side. Between the two, one use case acts as the hinge: collateral. And as always in this series, I will close with my own view on the conditions under which these benefits are real.

1. Demand: what tokenisation changes for the investor

Let's start with a precaution: not all demand is equal, either in size or in time horizon. Some of it is proven, with figures to back it up. Some is emerging. Some, finally, is a bet on the future. Mixing or confusing the three is the surest way to fail when launching a tokenisation project. Let's take them one by one.

Proven demand first. What we observe today is that tokenisation mainly involves money market funds. If you share Larry Fink's vision that, in time, every asset will be tokenised, it is only natural to start with the simplest product: the money market fund. It is liquid by design, well understood operationally and relatively easy to value.

The beauty of it is that, in a world of positive interest rates, the money market fund offers a real, concrete use case. Let's take a closer look.

Historically, the first clients of tokenised money market funds have not been traditional investors but crypto-native players. Stablecoin issuers, exchanges and trading firms hold large amounts of cash on-chain and are looking for yield. For them, the tokenised money market fund is not an innovation; it is an obvious next step. Already convinced by the technology, they want to put their cash to work while staying on-chain. Based on our estimates at PwC, the potential addressable pool is hundreds of billions of dollars.

Next come corporate treasurers. Their need is simple: put cash to work without sacrificing access to it. Yet traditional money market funds are often impractical for startups, SMEs, professional firms and other mid-sized businesses because minimum investments can be high and distribution and onboarding are designed primarily for large investors. A tokenised money market fund can change the investor experience: near-instant confirmation, same-day subscriptions and redemptions, and access to cash beyond normal office hours. From the treasurer's perspective, the fund begins to feel almost as liquid as cash in a current account, while continuing to earn a return.



Spiko provides a useful European illustration. After first gaining traction with crypto-native users, it broadened its reach to startups, SMEs, professional firms, holding companies and other businesses historically underserved by traditional fund distribution. By February 2026, it reported more than 3,300 active clients, with business clients representing over 92% of assets under management. Its investor-facing service also shows what '24/7' can mean in practice: instant euro withdrawals

of up to €500,000 per day, including weekends and public holidays. The important distinction is that the client's liquidity experience can be continuous even though the manager still deploys or liquidates the underlying assets during traditional market hours. That requires liquidity buffers and modern payment rails, which have a cost.

According to our research at PwC, the potential market runs into several trillion euros: a large pool of corporate cash that traditional fund distribution does not efficiently serve today. For the first time, fund managers can realistically compete with banks for the operating cash of businesses far beyond the large-corporate and institutional segments. Tokenisation is not the only ingredient: direct distribution, regulation and modern payment rails matter too. But a native on-chain register helps make low-cost servicing, small investment amounts and continuous transferability economically viable.

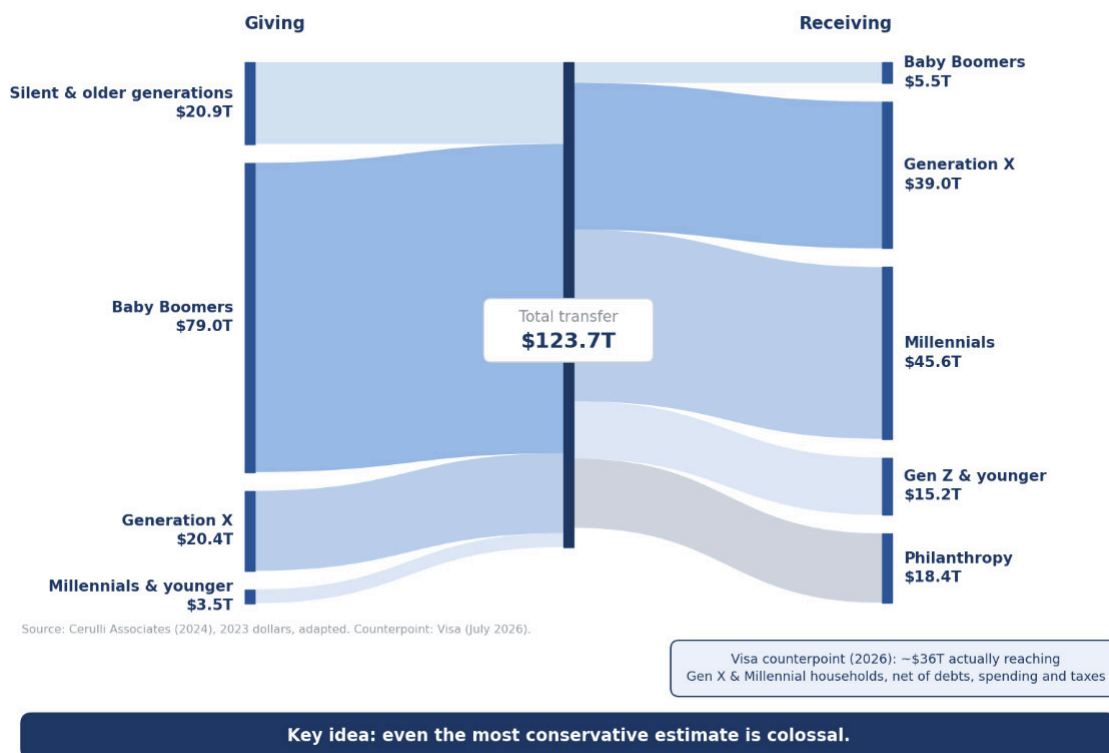
Then comes emerging demand. We can already see the next waves of tokenised products taking shape: other UCITS funds, ETFs and alternative funds.

In the context of the democratisation of private assets, evergreen funds and ELTIF 2.0, tokenisation has the potential to reinforce a trend already under way: giving wealthy retail investors access to private equity and private debt. To this I would add embedded distribution: fintechs and neobanks integrating the fund share directly into their apps as a building block of the user experience. The fund is no longer something you look for at a distributor; it is something you find in an app.

That leaves prospective demand: the bet on the future. Estimates of the great wealth transfer vary widely because they do not measure the same perimeter. Cerulli projects \$124 trillion in total transfers through 2048, including transfers to heirs and charities. Visa estimates that around \$36 trillion will actually reach Gen X and millennial households over the next twenty years, after accounting for liabilities, retirement spending, taxes, fees and other exclusions (Visa, July 2026).

Let's remember one thing: even the low end of the range is colossal. And these investors have grown with an iPhone in the hands: payments appear instant and purchases on Amazon arrive the same day, yet subscribing to a fully dematerialised financial asset can still take several business days.

One last element: emerging markets, where millions of savers have no access to financial markets. There, stablecoins have demonstrated the appetite for the digital dollar. From the user's perspective, the tMMF can look like a kind of 'stablecoin with yield'. I do mean prospective: between the logic and the reality stand KYC, regulation and distribution.



2. Collateral: when the fund share gets to work

Major asset managers (BlackRock and Franklin Templeton, to name but two) are currently focusing their efforts on this use case. It sits halfway between demand and operations, which makes it the natural hinge of this article.

Today, meeting a margin call means either parking cash that sits idle or redeeming fund shares to deliver another eligible asset. In both cases, the yield stops at the door of the collateral process. With a tokenised money market fund accepted as collateral, the equation changes: the share can be transferred in minutes and can continue generating a return while serving as collateral. Collateral no longer sleeps; it works.

This is no longer a hypothesis, and the news could hardly be fresher. On 15 July 2026, DTCC, the US post-trade infrastructure, processed its first tokenised transactions in a production environment with more than 30 institutions. The textbook case of the day: JPMorgan tokenised shares of an ETF, the Invesco QQQ, and posted them as margin collateral with CME without unwinding the underlying position. Readers of Part 2 will recognise a digital twin in action. A broader rollout of the service has been announced for October 2026.

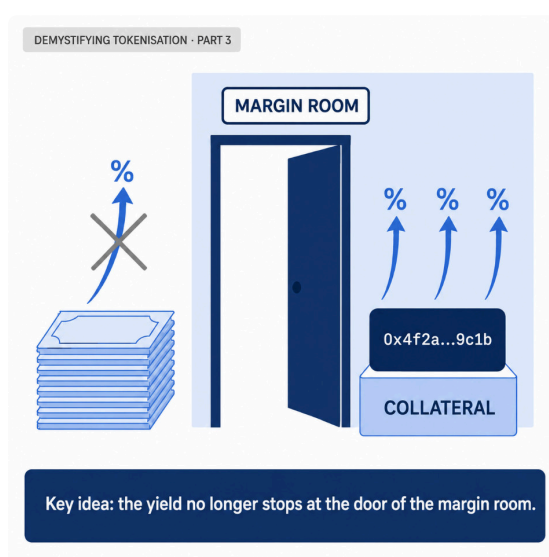
On money market funds specifically, the GDF/ISDA working group on collateral mobility brought together participants from more than 120 firms, including BlackRock, Franklin Templeton and the clearing houses CME and ICE, to test the use

of tMMFs as margin collateral. Its report was published in July 2026, and players such as DBS have announced plans to explore their use as collateral. Some describe collateral management as the ‘killer app’ of tokenisation for traditional finance.

And the calendar argument reinforces this use case: picture a margin call on a Friday evening in stressed markets. On one side, a fund redemption constrained by cut-off times and banking hours. On the other, an on-chain transfer (or access to liquidity against the tokenised share) in a matter of minutes.

Let me be transparent once again: the acceptance ecosystem is still under construction. Who accepts what, at which haircut, under which legal framework for security interests: all of this is taking shape. But the direction of travel is clear.

And if this transfer in a matter of minutes is possible, it is thanks to what comes next.



3. The plumbing: what tokenisation changes inside the machine

Let’s now talk about what nobody sees: the plumbing.

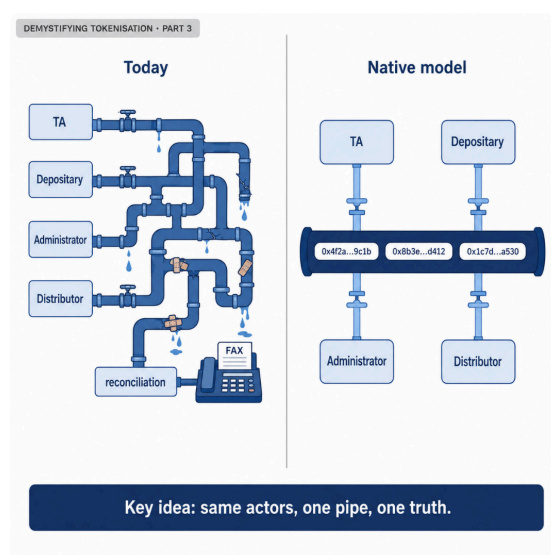
The problem with the traditional world is not that its systems are old. Well, they are: some transfer agency platforms date back to the 1990s, designed for batch processing, with daily cut-offs and files exchanged overnight. And while we debate blockchain, part of the industry still receives orders or confirmations by fax!

But the real problem lies elsewhere, and you know it from the first two articles in this series: every player in the chain (i.e. transfer agent, depositary, administrator and distributor) maintains its own version of the truth. An entire reconciliation industry exists to check continuously that these versions match. In a native model, blockchain removes much of the register reconciliation problem: instead of several

independently maintained records, participants can draw from one authoritative source of truth. This is exactly the promise of the native model we saw in Part 2, and it is exactly what mirroring cannot deliver: it adds one more version to reconcile.

To measure what is at stake, a single figure is enough: DTCC processed the equivalent of \$4.7 quadrillion in securities transactions in 2025 (DTCC, July 2026). You read that right: quadrillions. The plumbing of the markets operates at a scale that makes even modest operational improvements meaningful.

Second front: settlement. Subscriptions and redemptions often settle at T+2 or T+3 today, and much later in alternatives. In the meantime, cash sits idle and counterparty risk runs. On-chain settlement, by contrast, can be near-instant and atomic: the share against the cash in a single operation, with no principal-risk window between delivery of the share and payment.



And what about costs? The precise figures differ from one study to the next and do not always measure the same thing, so let's stay qualitative. Once the transaction is recorded on an authoritative shared ledger, the marginal cost of post-trade processing can fall materially: the traditional world mobilises systems, teams and reconciliations for every movement, whereas the blockchain records the operation once for everyone. Franklin Templeton, which ran its traditional transfer agent in parallel with the on-chain register for several months, described the observed difference as striking (Jenny Johnson, Milken Institute, May 2024). Let's remember the idea rather than a headline number: the gain can change the economics of the register.

That said, these claims need qualifying. Fully atomic settlement actually stands on three legs. The share, now tokenised, settles in seconds. The cash must also be on-chain, and that subject deserves an article of its own: Part 5. And the portfolio assets still settle in the traditional world, at the traditional world's hours. The native fund has a source of truth for its register, but its portfolio still lives in the other world. For

now, instantaneity stops at the portfolio's door, and that is a real brake on capital deployment. But here too, things are moving: major exchanges, including NYSE and Nasdaq, have announced their own tokenisation initiatives.

As for automating all these operations, it relies on rules that execute themselves. That has a name, and it is the subject of Part 4.

4. The conditions: when are the benefits real?

By now you know this series' refrain: no promise without a condition. What follows is my opinion and, as always, it is mine alone.

First condition: the model. The operational gains presuppose a native issuance. Mirroring brings no structural register gain; if anything, it adds a layer. The digital twin brings distribution, not register gains. Go back to the table in Part 2: here, it becomes a decision framework.

Second condition: the transition. As long as a fund serves both traditional and on-chain investors, it runs two rails in parallel. And two rails cost more than one. Costs go up before they come down. Projects that ignore this end up disillusioned.

Third condition: governance. On an immutable register, an error cannot simply be overwritten. It must be corrected through an explicit and governed transaction, leaving the original entry and its correction visible in the audit trail. That is manageable, but it is a change of operational culture that teams often underestimate.

Fourth condition: the ecosystem. Tradability and secondary-market liquidity cannot be decreed. And the asymmetry we have come across twice in this article deserves to be named: today, we tokenise funds' liabilities, but not yet all of their assets. That is changing: the value of tokenised real-world assets tracked by rwa.xyz, excluding stablecoins, grew from roughly \$16 billion to around \$35 billion between early 2025 and July 2026, while tokenised Treasuries and on-chain repo continued to advance. The day the asset side catches up with the liability side, the benefits will change scale. Until then, the brake is real. But it is a trajectory, not a wall.

To sum it up in one table, here are the benefits mapped against the models from Part 2:

	Mirroring	Digital Twin (distributor)	Digital Twin (feeder)	Native issuance
Broader access and distribution	Limited: a shop window	Yes: its very purpose	Yes: its very purpose	Yes
Usable as collateral	No: the mirror token has no value of its own	Partial: depends on the token issued by the distributor	Yes: the feeder share circulates on-chain	Yes, subject to legal eligibility and market acceptance
Register reconciliations materially reduced	No: one more version to reconcile	No for the fund	No for the master	Yes: one authoritative source of truth
Near-instant settlement	No	Partial: on the token layer only	Partial: at feeder level	Yes, if the cash is also on-chain
End-to-end automation potential	No	Partial	Partial	Yes, via smart contracts (Part 4)

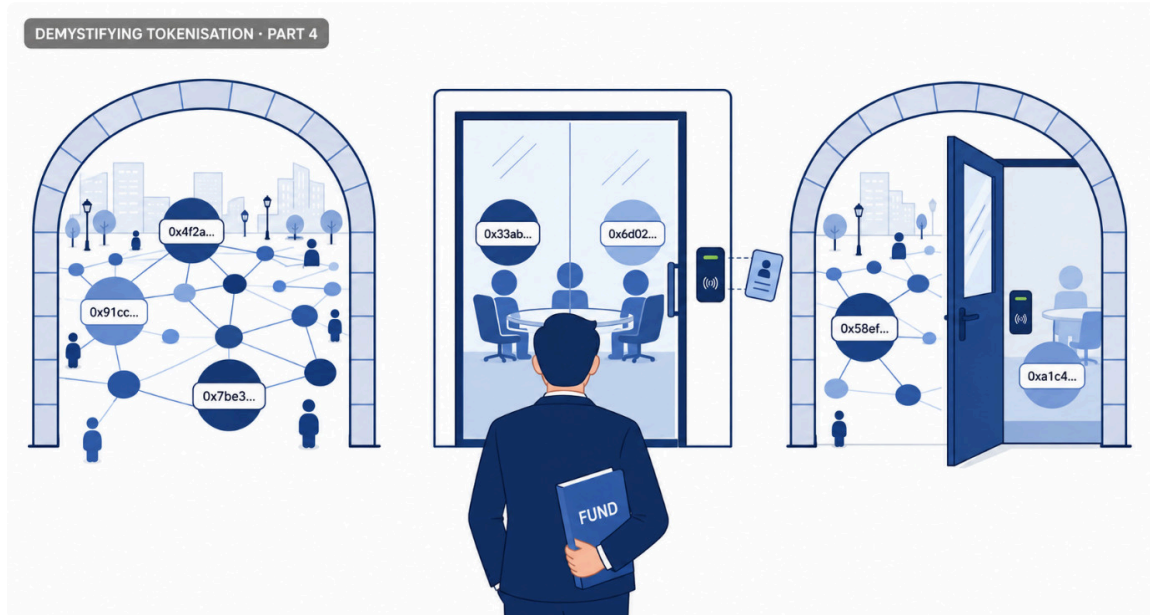
Key idea: choose the model, and you choose the benefits.

So, why tokenise an investment fund? Because demand exists: proven in some segments, emerging or prospective in others. Because the operational gains are real, provided you choose the right model and manage the transition.

Part 4 looks under the bonnet of those famous rules that execute themselves: smart contracts.

Public, Private or Hybrid? Choosing the Infrastructure

First published on LinkedIn · 25 August 2026



After reading the first three articles, you are convinced: you want to tokenise your investment fund.

But as soon as you start your project, you discover that thousands of blockchains exist. Hence the natural question: which one should you choose? What sets them apart?

To make matters worse, the jargon rivals your garage mechanic's or your IT manager's: "permissioned" and "permissionless", "proof-of-work" and "proof-of-stake", "smart contracts", "ERC-20", "ERC-3643" and so on.

Don't worry: you are in the right place, and we are going to make all of this more digestible.

1. Public blockchains: the register held by everyone

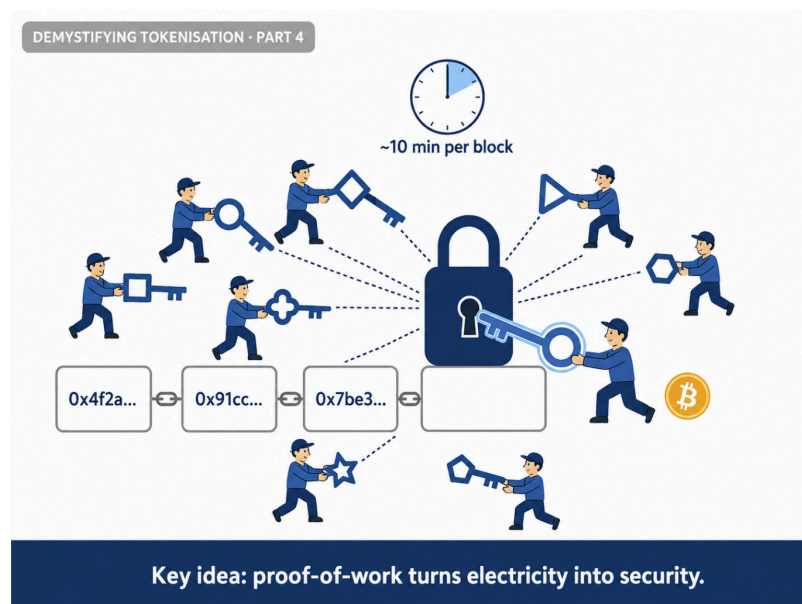
In my first article, I deliberately spoke about "blockchain" in the broadest sense, without mentioning the variety of mechanisms and technologies behind the word. The goal was first to equip you with one simple concept: blockchain rests on a founding principle, the decentralisation of the register.

Bitcoin, created by the mysterious Satoshi Nakamoto (to this day, nobody knows who is behind the pseudonym), introduced this model. Its white paper was published at the end of 2008, just after the subprime crisis, with one goal: enabling peer-to-peer electronic payments without relying on a trusted intermediary.

Bitcoin groups pending transactions into blocks. A new block is added to the register roughly every ten minutes, on average.

The consensus mechanism used by Bitcoin, meaning how the network agrees on the next valid block, is called proof-of-work. To simplify, imagine a padlock race. Thousands of miners try billions of keys at random. The first to find a valid combination proposes the next block and receives a reward in bitcoin.

The block is broadcast to the network, where each full node independently checks that it follows the rules before updating its copy of the register. The network automatically adjusts the difficulty of the race so that a new block is found every ten minutes on average.



This is where decentralisation becomes a security mechanism. To rewrite recent history reliably, an attacker would need to build an alternative chain faster than the honest network, in practice by controlling most of Bitcoin's computing power. This is the famous "51% attack". On Bitcoin, the cost would be astronomical. Smaller proof-of-work blockchains have suffered such attacks: Ethereum Classic, for example, was attacked several times in 2019 and 2020.

The model also has limits: it consumes large amounts of electricity and processes transactions far more slowly than centralised payment networks.

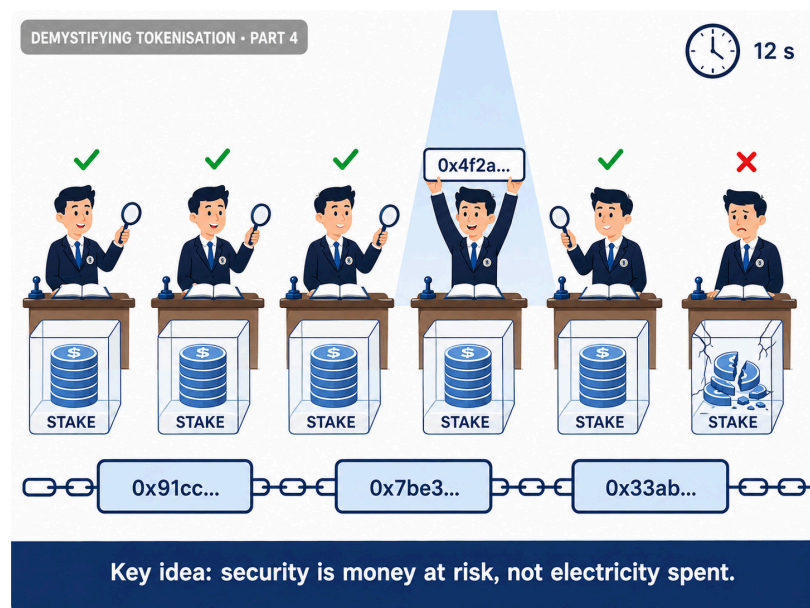
Still, Bitcoin opened the way. Because it was open-source, others could improve the technology and extend its use cases.

Ethereum was revolutionary on precisely this point. Conceived in late 2013 and launched in 2015, it made the blockchain programmable, enabling decentralised applications far beyond the transfer of a currency.

Ethereum also groups transactions into blocks, but a new block can be proposed roughly every twelve seconds. Its main network remains limited in the number of transactions it can process directly, so Ethereum increasingly relies on complementary networks known as Layer 2s. They bundle many transactions before publishing the result on Ethereum.

Ethereum now uses proof-of-stake, which consumes far less energy. To simplify: imagine a network of notaries, each depositing a substantial sum as collateral for the right to help keep the register. Every twelve seconds, one is selected to propose the next block, while others check the work and vote on its validity.

If validators behave correctly, they receive rewards in ether. If they try to cheat, they risk losing part of the capital they have put at stake. Security therefore rests not on the electricity spent, as with Bitcoin, but on the money validators stand to lose if they commit fraud.



Ethereum's other great novelty was the ability to automate rules. This is what we call smart contracts, and we will return to them shortly.

I will not cover every public blockchain, but these two examples give you the essentials. Public and permissionless are often used together: anyone can access the network and, subject to its protocol rules, participate without an invitation. These blockchains make different trade-offs between decentralisation, security, capacity and speed. Faster does not automatically mean less secure: what matters is how performance is achieved and what assumptions the network makes. The key point for

your choice is this: validation is entrusted to a decentralised network that nobody controls: not you, not your TA, not your regulator. The register is held by everyone, and by no one in particular.

2. Private blockchains: the register by invitation only

The second broad family is the private blockchain, more commonly described in the jargon as permissioned. The two terms are often paired but are not exact synonyms: “public” or “private” describes how open the network is, while “permissioned” describes who is authorised to participate.

Unlike the public model, validation is restricted to identified and authorised participants. The network still uses a technical consensus mechanism, but legal agreements and governance determine who may join, who operates the infrastructure and who is accountable. To put it in a picture: the public register is kept on the public square, where anyone can check it; the private register is kept in a room, and access badges are handed out.

When the first tokenisation projects got under way, they were mostly built on private blockchains: legal uncertainty, scaling issues on the public side and, above all, an image still too closely associated with crypto. This was the world of Hyperledger Fabric, Corda and other platforms designed for institutions.

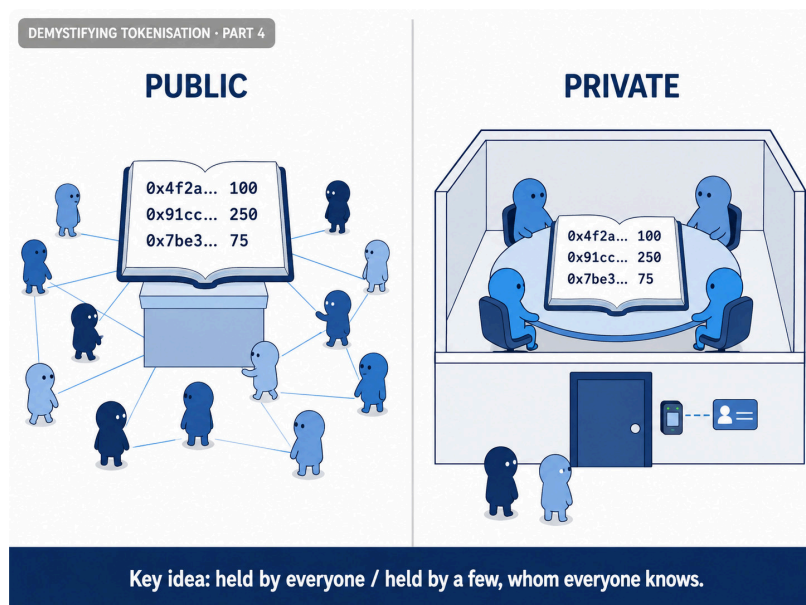
This approach drew plenty of criticism from the Web3 community: entrusting the register to a small group of authorised entities seemed to contradict the very idea of blockchain. Beneath the blockchain varnish, critics saw a return to our good old concept of centralisation.

The market has since moved. Many of the largest and most visible on-chain fund products now operate on public networks such as Ethereum and its Layer 2s, Polygon, Stellar or Solana. The legal framework has become clearer, the technology has proved more robust and institutions are more comfortable with public infrastructure.

Nothing is ever black or white, however. Public infrastructures may be robust and capable of handling volume, but they raise a governance question: who decides on maintenance, upgrades or responses to security incidents? We will return to this at the end of the article, because the strength of the community behind a blockchain may matter as much as the technology itself.

The categories are also becoming less clear-cut. Canton Network, for example, presents itself as a public Layer 1 blockchain with privacy built into the protocol and permissioning configured at application level. Its architecture can combine a public coordination layer with private workflows. In other words, infrastructure is emerging that seeks to combine openness, institutional control and confidentiality.

And what about the TA? Depending on the architecture, your TA, your depositary or the control agent under Blockchain Law IV could operate or oversee validating nodes. But the legal role and the technical role should not be confused. We are back to the framework of this series: the public register is held by everyone and by no one in particular; the private register is held by a few, whom everyone knows.



3. Smart contracts: rules that execute themselves

I promised you this at the end of Part 3: it is time to open the bonnet.

So what exactly is a smart contract? Picture yourself in front of a vending machine. You enter a code, the machine displays the price, you pay and it releases your drink.

A smart contract is the software inside the machine: predefined rules that, once triggered, execute automatically and carry out actions. The term is slightly misleading. It is not necessarily a legal contract; it is a program deployed on a blockchain.

There are also two important limits to the analogy. A smart contract does not act spontaneously: a person or another system must trigger it. And it cannot see the outside world by itself. An investor's KYC status, the fund's NAV or confirmation that fiat cash has arrived must still be supplied by a trusted system, sometimes called an oracle. The machine executes the rules, but someone still has to stock it and tell it the price.



This is where things become interesting for asset management. During a subscription or redemption, the TA executes the terms of a contract: it checks that a set of conditions is met before delivering units or reimbursing an investor.

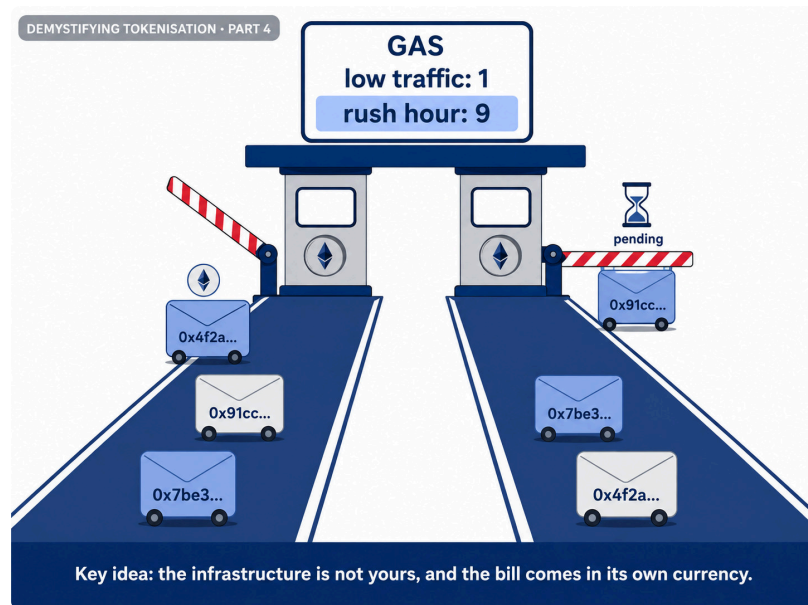
One appeal of tokenisation is the ability to automate functions that consume time and resources: subscriptions and redemptions, but also dividend or interest payments, transfers and the blocking of units.

A final word on those impenetrable acronyms, ERC-20, ERC-3643 and so on. Where there is software, there are standards. Instead of starting from a blank page, developers reuse a common set of rules. ERC-20 is the basic fungible-token standard and can be enriched. ERC-3643 is designed for tokens subject to compliance controls, including potentially fund units. Many other standards exist, but the idea remains the same.

One point, however, is often discovered too late by traditional finance: on a public blockchain, computation is not free. Operations submitted to the network, such as issuing or transferring a unit, consume “gas”, a measure of the computing effort required. The fee is paid in the blockchain’s native currency, such as ether on Ethereum. Gas prices the use of a shared infrastructure and helps protect it against spam. This has three concrete consequences for a tokenisation project.

First, someone in the operating chain must fund the gas, directly or through a relay or service provider. That does not necessarily mean that the fund, the TA or the investor must hold ether, but the cost and responsibility do not disappear: they move elsewhere in the model. Second, who ultimately pays: the fund, the TA, the investor or the provider? The answer shapes the operating model. Third, the price is not fully predictable. Like a toll that rises at rush hour, gas varies with network congestion,

and an underpriced transaction may remain pending. Layer 2s reduce these costs dramatically, but the principle remains. On a public blockchain, the infrastructure does not belong to you, and it hands you the bill in its own currency.



4. So, which one should you choose?

Let us return to the question raised in the introduction: the time has come to choose. In practice, the choice often reflects both your needs and the infrastructure offered by the technology provider supporting the project. But the management company, however well supported, remains responsible and must have its say. The choice is not neutral: transparency, security, costs and governance are all at stake.

Public, private or hybrid? And among the thousands of public chains, which one? It would be dishonest to give you a clear-cut answer. You know my favourite answer by now: it depends. But it depends on what? Three questions structure the choice.

First question: who should hold the register, and who should be able to verify it? If your distribution targets the on-chain ecosystem, including the crypto-native investors and collateral markets discussed in Part 3, the register held by everyone has a strong logic. If your priority is to control the validators, such as your TA, your depositary or another trusted actor, the invitation-only register still has serious arguments.

Second question: what degree of automation? Subscriptions, redemptions, distributions, blocked units: the more rules you want to execute on-chain, the more the programmability of the infrastructure and the maturity of its standards matter. Not all blockchains are equal here, and some architectures execute part of the rules off-chain.

Third question: how much operational reality are you prepared to absorb? Gas and its funding model, the governance of a network nobody controls, the maturity and resilience of its ecosystem: none is a deal-breaker, but each must be provisioned for in budgets, skills and procedures.

My opinion, and mine alone. Market momentum is increasingly concentrating on public blockchains, particularly for products targeting on-chain investors, cash and collateral markets. Not because public networks are superior in every respect, but because that is where open ecosystems and composability are strongest. Put differently: you do not choose a blockchain the way you choose a piece of software. You choose a marketplace, and a marketplace is worth what the people in it are worth. Hence my favourite criterion, the least technical of all: the community. A living blockchain means developers, validators, maintained standards and fast fixes. A deserted blockchain is an empty shopping centre: the walls are there, but nobody opens a shop.



Here is the framework in a single table:

	Public	Private	Hybrid
Who validates the register	An open network, without invitation	A known group, by invitation	A mix of open and controlled participation
Security	Decentralisation, economic security and protocol design	Consensus design, governance and participant controls	Trust model of each layer
Programmability and standards	Mature smart contracts and open standards	Varies by platform	Varies by architecture and layer
Costs	Variable fees, often in a native currency	Contractual and more predictable	Depends on the economic model
Ecosystem and liquidity	Largest open on-chain ecosystem	Limited to authorised participants	Selective access; still developing
Governance	Distributed across protocol stakeholders	Network members and operator	Consortium, operator and/or public protocol

So, public, private or hybrid? You now have the framework: who validates, how much automation, how much operational reality and, above all, where your ecosystem is. But one major absentee remains. We have talked about the unit, the rules and the infrastructure. To settle a subscription fully on-chain, and potentially atomically, the cash leg must also be on-chain. The stool from Part 3 is still waiting for its missing leg: that is the subject of Part 5.

The Cash Leg, Plumbing or Sovereignty?

First published on LinkedIn · 1 September 2026

DEMYSTIFYING TOKENISATION · PART 5



In the first four parts of this series, we covered the tokenisation of investment fund shares. The share is on-chain: its register lives on the blockchain, and we have seen who can keep it and which register counts.

But opposite the delivery of the share sits the payment. And if that payment stays entirely on the old plumbing, we lose much of the benefit of the blockchain infrastructure. Remember Part 3: fully atomic settlement stands on three legs, and the cash leg was still drawn in dotted lines. That is the leg we tackle today. Hence the need, for the fund industry, to bring cash on-chain too, or at least synchronise the cash leg with the tokenised share, for subscriptions and redemptions.

Prima facie, this looks like a technical subject. I would argue the opposite: the technology is the least complex part of the subject. Fair warning: this fifth article, dedicated to stablecoins, will certainly be the most political of the series, because it touches the instruments of economic policy: monetary power, but also fiscal power.

The proof lies in the White House's own communication when President Donald Trump signed the GENIUS Act, on 18 July 2025: *"By driving demand for U.S. Treasuries, stablecoins will play a crucial role in ensuring the continued global dominance of the U.S. dollar as the world's reserve currency."* And this is no partisan issue (the text passed with

a large bipartisan majority: 68 votes to 30 in the Senate, 308 to 122 in the House). Democratic Senator Kirsten Gillibrand, a co-author of the bill, said the same thing in the same words: the point is to “*safeguard the dominance of the U.S. dollar*” (statement of 17 July 2025).

So the stablecoin is not just a piece of plumbing. It is an instrument of power. And the news has just reminded us of it: only days ago, Revolut launched its euro stablecoin, issued out of Luxembourg. We will come back to it. Let me walk you through why: what money is (spoiler: a register), what a stablecoin is, how states have responded, and what all of this changes in practice for an investment fund.

1. Money: a register that does not know it

Money is classically defined by three functions: a unit of account, a store of value, a medium of exchange. Keep them in mind, but that is not where our subject is decided.

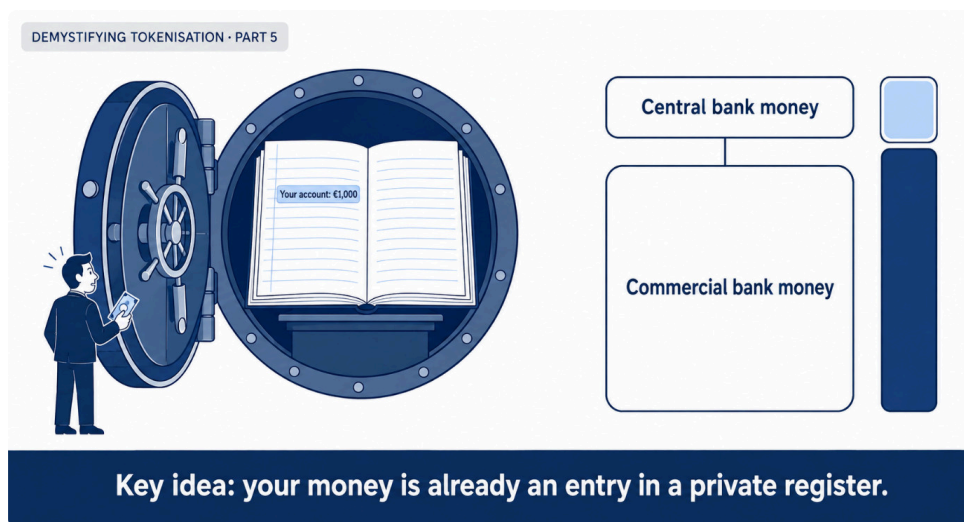
Ask yourself a different question instead: what does “having €1,000 in your account” actually mean? It is not a bundle of banknotes sitting in a vault with your name on it. It is a line in the register of a commercial bank. In other words, a claim on that bank.

There are in fact two kinds of money living side by side. Central bank money: banknotes, and the reserves that banks hold with the central bank. And commercial bank money: your deposits. The second dominates massively: most of the money used in a modern economy is commercial bank money, and the same is true in the euro area.

Your money is therefore already digital, and it is already, for the most part, an entry in a private register. The question running through this series applies to money word for word: who keeps the register of the cash, and which register counts?

This reading defuses, in advance, a classic objection to stablecoins: “they privatise money”. The money you use every day is already, for the most part, a private liability. Commercial bank money is, of course, embedded in a public framework of regulation, deposit protection and central bank settlement. What changes with a stablecoin is the identity of the register keeper, and the law that applies to it.

And what about the TA in all this? The TA lives precisely at the border between the two registers: the register of shares, which it keeps, and the register of cash, kept by the banks. Every subscription is a round trip between the two: a wire arrives, a reconciliation happens, a share is issued. Keep that picture in mind; we will come back to it.



2. The stablecoin: money through the register... a private one

A stablecoin is a token issued on a blockchain whose issuer promises convertibility at any time, one for one, into an official currency. One token, one dollar (or one euro). To keep that promise, the issuer holds reserves: bank deposits and, above all, short-term Treasury bills.

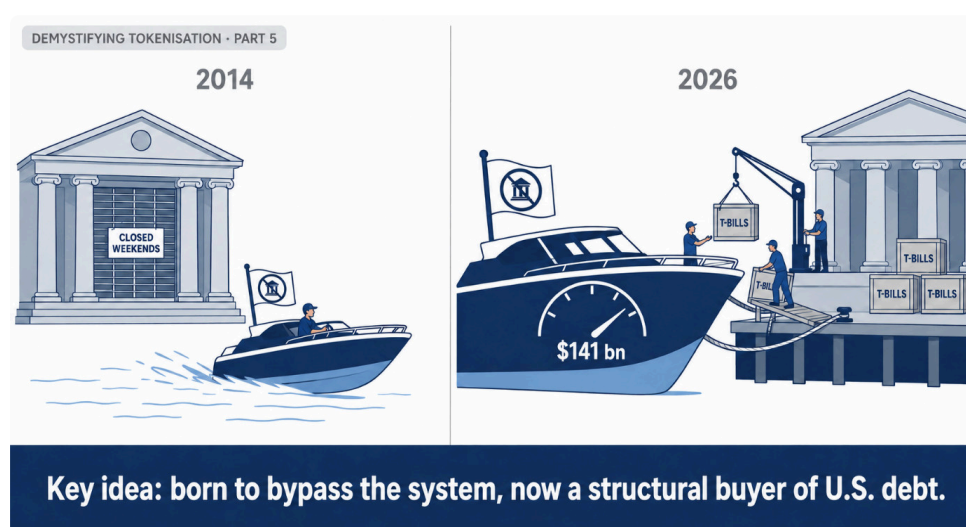
The most accurate image is the casino chip. The chip circulates from hand to hand inside the casino, but its value rests on the cashier's desk, which takes it back against dollars on the way out. The stablecoin circulates on the blockchain, but its value rests on the issuer and its reserves.



Now reread that description through the framework of this series. The register of token holders is kept on-chain: it is the register that counts to establish who controls what, and it moves 24/7, peer to peer. But the claim itself remains recorded on a very classical register: the issuer's balance sheet. The stablecoin does not remove trust; it relocates it: from your bank to an issuer.

The history deserves telling, because it is ironic. The modern fiat-backed stablecoin model emerged in 2014 with Tether, to serve crypto platforms: letting traders step out of volatility without going back through a banking system that was slow, closed at weekends and reluctant to open accounts for them. An instrument born to bypass banks and, by extension, states.

Ten years on, what do we find in the reserves? U.S. Treasuries. Tether reported a record total direct and indirect exposure of \$141 billion to Treasuries at the end of 2025, a scale it compared with that of the world's 17th largest sovereign holder of U.S. debt (Tether attestation, January 2026). The total stablecoin float is close to \$300 billion (rwa.xyz data), of which more than 98% is dollar-denominated (Fortune, May 2026). The instrument born against the system has become a structural buyer of American debt. That is why Washington ended up embracing it.



3. The response of states: each defends its own register

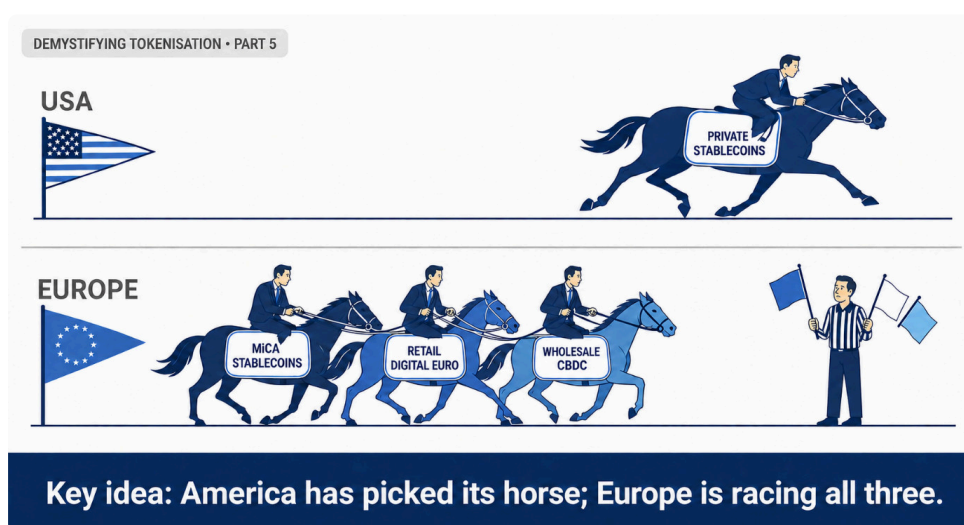
Let's go back to the quotes in the introduction. The American strategy behind the GENIUS Act is crystal clear: rather than issuing a public digital dollar, the United States is enrolling its private issuers. The deal is simple: a federal legal framework for the issuers; in exchange, reserves invested in Treasuries and a dollar that extends its register onto every blockchain in the world. The interest of the state and the interest of the issuers are aligned. To make the political choice explicit, Washington has even locked the door from the other side: the January 2025 executive order halted federal CBDC work, and legislation enacted in July 2026 prohibits the issuance of a U.S. CBDC until the end of 2030. America has made its current preference clear: private stablecoins rather than a public digital dollar.

Europe took the opposite path, and the chronology matters. In June 2019, Facebook announced Libra: a private currency, backed by a basket of currencies, aimed at its billions of users. A private tech company issuing its own money, with the capacity to reach billions of users worldwide, was perceived as a direct threat to monetary

sovereignty. Paris and Berlin formally opposed it as early as September 2019. A year later, in September 2020, the Commission proposed MiCA. MiCA is not an anticipation; it is a reaction: a framework designed to contain a threat to monetary sovereignty, not to grow a European stablecoin industry.

Let's be fair: regulation does not explain everything. From 2014 to 2022, the ECB's deposit facility rate was negative. And the business model of a stablecoin issuer is the yield on its reserves. Holding the underlying euros therefore generated a cost rather than a return, making the business model structurally unattractive. By the time rates turned positive again, dollar issuers had a ten-year head start in network effects. The result is the most political figure in this article: around \$300 billion of stablecoins in circulation, less than one billion in euros. Barely 0.3%. And yet some twenty issuers have achieved MiCA compliance, for some forty tokens (ESMA register); but compliance does not make a market.

Europe's problem is not the reaction; it is the indecision. Three projects are advancing in parallel. Private euro stablecoins under MiCA, driven notably by the banks: Qivalis, the joint venture that now brings together 37 European banks, is targeting a launch in the second half of 2026, subject to regulatory authorisation. And the movement reaches beyond banks: in August, Revolut announced a phased rollout of its euro stablecoin, EURR, initially in selected European markets. It is issued by an electronic money institution authorised in Luxembourg (Bridge, a Stripe company). The retail digital euro, whose legislation is still under discussion and whose first issuance could take place from 2029, subject to the adoption of the necessary legislation. And wholesale settlement in central bank money: the ECB's Pontes initiative, whose initial launch is planned for the third quarter of 2026, which is to say as you read these lines. Three projects, no designated priority. America has picked its horse; Europe is pursuing three different routes at once.



Let me add a fourth player, often forgotten: the banks themselves. Facing stablecoins, they are fighting back with tokenised deposits: your classic bank deposit, but recorded on a blockchain (JP Morgan led the way with its deposit token). The register

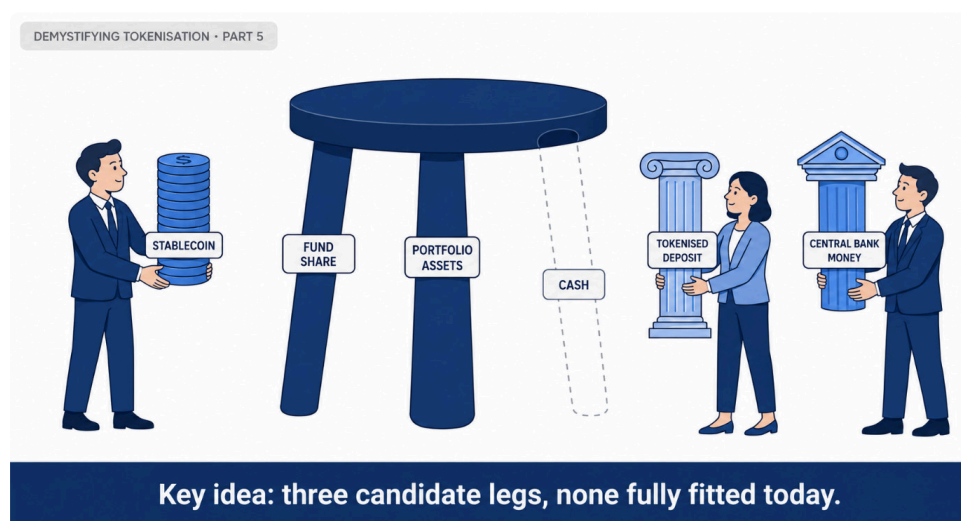
logic is different: the token remains a claim on your bank, in continuity with today's system. Banks are not defending a technology; they are defending their register.

4. And the fund in all this? The cash leg in practice

Back to our Luxembourg SICAV, and to the Friday evening of Part 3. The central promise of tokenisation is atomic delivery-versus-payment: the share and the cash change hands in the same transaction, or not at all. No more gap between delivery and payment, no more counterparty risk during that gap, and far less transaction-level reconciliation between separate systems.

Atomic settlement requires both legs to move together: either both transactions happen, or neither does. An on-chain share paid through a separate bank transfer is tokenised, but the settlement process is not yet atomic. The stool still wobbles.

In practice, what do you settle a subscription with, today, in a euro-denominated SICAV? Let's run through the options. The dollar stablecoin: liquid, available, but it introduces unnecessary currency risk for a euro fund. The euro stablecoin under MiCA: the right currency, a clear framework, but a float that is still embryonic. The tokenised deposit: continuity with the banking system, but proprietary solutions, bank by bank, with interoperability still to be built. Central bank money: the ideal settlement asset, but not yet widely available for tokenised fund transactions. No option is complete. That is exactly what a missing link looks like.



And what about the TA in all this? Its daily life is made of reconciling the register of shares with the register of cash. If the two legs become synchronised, much of today's transaction-level matching work disappears. The role moves upstream: verifying the investor (KYC, whitelisting), verifying the means of payment accepted by the fund, orchestrating the atomicity. Yesterday's TA reconciled after the fact; tomorrow's TA validates before it. More on this in Part 6.

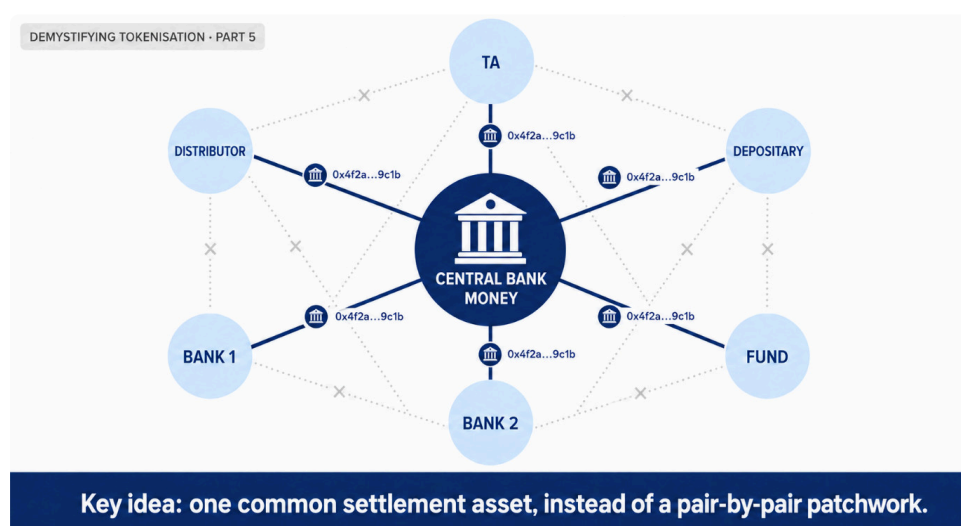
5. My view (and it is mine alone)

For market mechanisms such as investment funds, I believe the right cash leg is wholesale central bank money. Let me define the scope from the outset: I am not taking a position here on the retail digital euro, which is a societal debate (privacy, the role of banks, inclusion) and goes well beyond our subject.

Why wholesale? Three reasons. Trust: central bank money is the only settlement asset with no issuer risk. This is not an exotic idea; it is already the international standard for market infrastructures: the CPMI-IOSCO principles recommend settlement in central bank money wherever practicable. Fragmentation: if every fund accepts its own basket of stablecoins and deposit tokens, we recreate on-chain the very balkanisation we claimed to be solving; a common settlement asset preserves the singleness of money. Interoperability: a common pivot solves the problem once and for all, instead of solving it pair by pair.

There is a real opportunity for Europe here: a differentiating path between the entirely private initiative of the United States and the entirely state-run initiative of China (the e-CNY). Let's not forget that the private route introduces issuer risk into the chain, and can scale that risk up to systemic level. For wholesale operations, central bank money in euro has real cards to play.

I can already hear the last-mile objection: wholesale only covers the institutional level (TA, depository, distributors), not the end investor. Correct, and it is not a flaw: it is already today's monetary hierarchy. Banks settle with each other in central bank money; their clients, in commercial bank money. Bringing that hierarchy on-chain is nothing revolutionary.



My real worry lies elsewhere: the timeline. Pontes is preparing for its initial launch. Qivalis is targeting the second half of 2026. Deposit tokens are advancing. While the public option develops, the interim is filling up with private solutions. If wholesale

arrives in five years, the market will have standardised something else in the meantime, and it will be very hard to walk back. The ball is in Europe’s court: wholesale is not just the right answer; it is an urgent one.

6. Lucidity: what on-chain cash does not solve

First, issuer risk never disappears, except in central bank money. In March 2023, USDC lost its peg for a weekend because part of its reserves sat with Silicon Valley Bank. A stablecoin is worth what its balance sheet is worth, not what its blockchain is worth.

Second, concentration: two issuers dominate the global market. Entrusting the cash leg of the fund industry to a private duopoly raises a resilience question that is anything but theoretical.

Finally, two structural limits. A stablecoin pays no interest (the GENIUS Act explicitly prohibits it, and MiCA does the same for e-money tokens): for a fund, leaving cash sitting in stablecoins carries a real opportunity cost. And on-chain cash solves neither KYC, nor anti-money laundering, nor the question of who answers when settlement fails. Perfect plumbing carries clean water and dirty water alike.

Summary table

DEMYSTIFYING TOKENISATION • PART 5

Settling the cash leg: the options

Three candidate settlement assets for a tokenised fund, read through the framework of this series.

	Who keeps the register of the cash?	Who bears the risk?	EU status	Available to a fund today?
Stablecoin (e-money token)	A private issuer, on a blockchain	The holder (issuer risk)	MiCA in force	Yes, but euro float still embryonic
Tokenised deposit	A commercial bank, on a blockchain	The depositor (bank risk)	Existing banking framework	Proprietary solutions, bank by bank
Central bank money (wholesale)	The central bank	No issuer risk	Pontes initial launch (Q3 2026)	Not yet widely available

Key idea: no option is complete yet. That is the missing link.

Conclusion

The cash leg is not an implementation detail: it is half of every transaction. As long as it stays on the old plumbing, fund tokenisation will remain a promise half kept. The technology is ready; what is missing is a decision. And that decision belongs neither

to TAs nor to asset managers: it belongs to states. Remember the formula: cash, too, is a register. States may not always keep that register themselves, but they intend to decide who can keep it, and under what rules.

Part 6 draws the consequences for the players: if the register of shares and the register of cash become synchronised, who does what tomorrow? TA, depositary, paying agent, distributor: the impacts on the value chain.

Who Does What Tomorrow? The Impacts on the Value Chain

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In the first five parts of this series, we defined the main concepts needed to approach the tokenisation of investment funds: the register (Part 1), the models (Part 2), the benefits (Part 3), the infrastructure (Part 4) and the cash (Part 5). And every time, in the background, the same question: who keeps the register, and which register counts?

It is now time to look at how tokenisation affects the different players in the value chain of an investment fund.

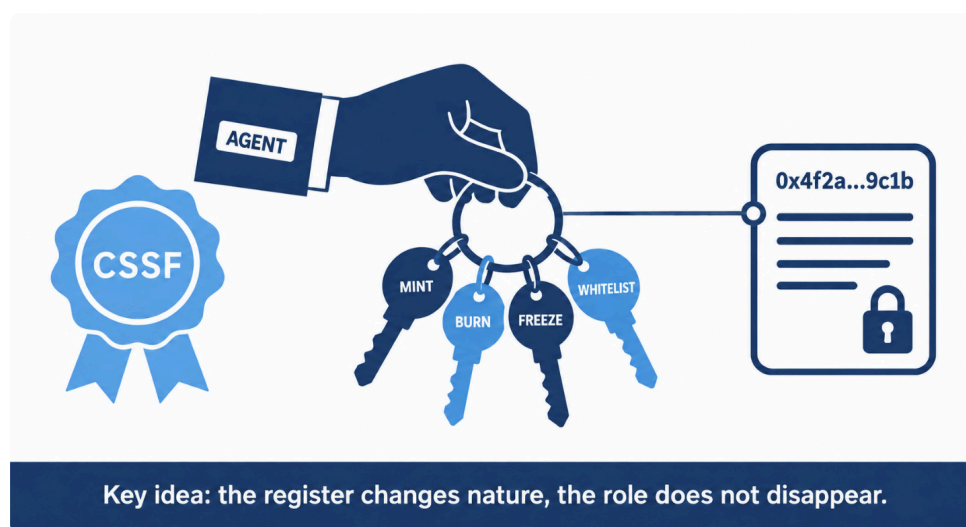
A preconceived idea first. In most conversations I have on the subject, tokenisation is seen as eliminating the role of the TA. If the register is on-chain, what is the point of still having a TA? And, as a consequence, that the subject concerns nobody but the TA. I hope that by the end of this article I will have shown that this preconception is wrong, on both counts.

Two points of method before we start. We place ourselves, de facto, in native issuance, the model where the on-chain register is the one that counts. In Digital Mirror, the blockchain remains an additional layer on top of the TA's register: it can bring new uses, but it still changes little in the distribution of roles. In Digital Twin, the impacts become more significant but remain partial.

Then, I distinguish two horizons. Today: the fund's liabilities are tokenised and the cash is on-chain, exactly where we finished Part 5. Tomorrow: the fund's assets are on-chain too. The second horizon is prospective, I say it now so that I do not have to say it again.

Six players on the programme: the transfer agent, the central administration, the depositary, the distributor, the management company and, under its responsibility, the portfolio manager.

1. The transfer agent: the register changes nature, the role does not disappear



Let's start with the usual reflex, the one from the introduction. The register is on-chain, transfers go from wallet to wallet, so what is the point of a register keeper?

Take the keyring from Part 1 again. The smart contract of a tokenised fund has reserved functions: issue shares (mint), cancel them (burn), freeze a position (freeze), enter an investor on the white list (whitelist). Each of these functions is controlled by a key, and if we take the example of the ERC-3643 standard, initiated by Tokeny and born in Luxembourg, the role that holds this key even has a name: "agent". Somebody holds this key, and this somebody takes over a central part of what a TA does today, with a different tool. The register changes nature, the role does not disappear.

And there is a reminder from Part 1 that settles a good part of the debate. The register of a fund is not kept by just anyone: the law requires it to be maintained, the registrar function is part of the administration of a Luxembourg fund, and providing that function is a regulated activity subject to CSSF authorisation and supervision. The blockchain changes nothing to this obligation. It changes the tool, not the responsibility: somebody has to answer for this register, in front of the regulator, and in front of the investors, since it is this entry that establishes their ownership. An

error in the register is an investor who no longer owns what he thinks he owns, and this stays true if the register is a smart contract. As long as this obligation exists, the role exists, whatever the name of the one who performs it.

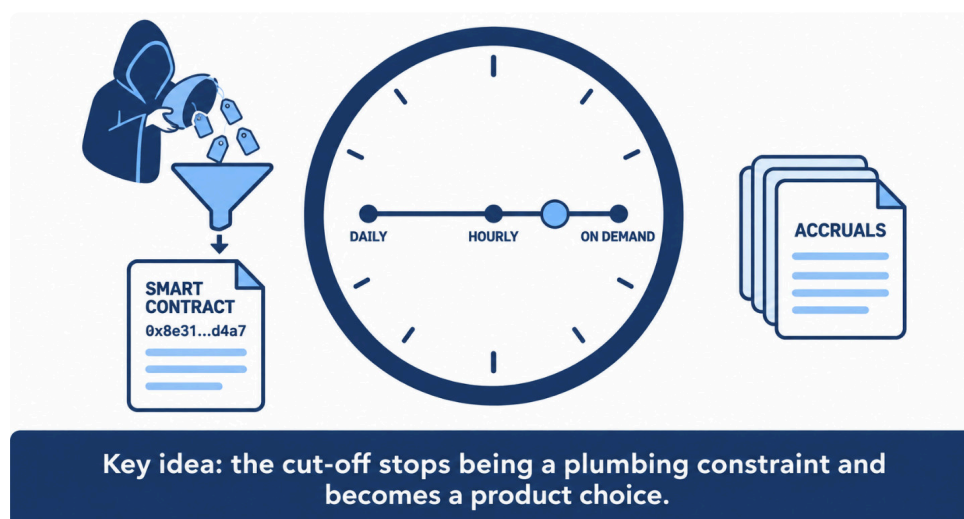
What changes is the content of the job. Already today, with the cash on-chain, the reconciliation between the register of shares and the register of cash, the one that keeps a good part of the teams busy, is strongly reduced. Not entirely: there remain the omnibus positions of distributors, the tax side, everything that still lives in Twin. The work moves upstream, towards the verification of the investor before he can receive a share, the verification of the means of payment the fund accepts, the orchestration of atomicity. The TA validates before, instead of reconciling after.

And the nature of the business changes fundamentally: the TA now becomes a technology provider. Choosing the chain or chains with the management company (we spent Part 4 on this), deploying and configuring the smart contract, translating into on-chain logic the structure of the fund, its sub-funds, its share classes, the rights attached to the shares and their transfer rules. Tomorrow, when the assets are on-chain too, the TA will become the operator of the interface between the register of shares and the register of assets, subscriptions in kind and collateral included.

The uncomfortable question: a TA that becomes a technology provider steps onto the ground of the Spikos, Tokenys and Securitizeds of this world, and the reverse is just as true. Who wins, the traditional TA that invests and transforms itself, or the tech that learns the role of the TA? I come back to it at the end of this article, in my opinion section.

New risk, and it is a big one: the key and the infrastructure. Who governs it, who holds it, who can sign what, what happens if it is lost or compromised. The safe from Part 1 has changed its lock.

2. The central administration: the cut-off becomes a choice, not a constraint



At first sight, the central administrator, the one who calculates the NAV, seems little affected. It values the portfolio as before, and somebody has to publish the result on-chain so that the smart contract knows at which price to issue or destroy shares. It is the oracle of Part 4: someone still has to stock it and tell it the price. A connection between the administrator and the smart contract, and that is about all.

Tomorrow, it tips over. If the fund's assets are on-chain too, positions and flows become readable much more directly. And if the prices and the other data needed are available too, a much more frequent NAV (even on demand for some portfolios) becomes technically conceivable. With the extended trading hours of Nasdaq and the NYSE (SEC approval, September 2026), as with new entrants such as Lise, the French tokenised stock exchange, the destination is clear: markets that are more and more continuous. Some operations, such as accruals, fees, provisions, swing pricing or tax, will nevertheless remain off-chain. Hence the formula: the cut-off stops being a plumbing constraint and becomes a product choice. And the complexity of the fund accountant's job will certainly increase sharply.

Same thing for the risks. Automated calculation makes people dream of a world without NAV errors. The error does not disappear, it changes nature. It moves from the human to the oracle and to the code, and a wrong price pushed on-chain is a wrong price executed instantly. The new risks have names: interruption of the chain, a bug in the smart contract, intraday volatility of an asset valued continuously.

And what about the TA in all this? The border between TA and administrator moves. Whoever keeps the register of positions already holds half of the NAV.

3. The depositary: watching a wallet



The Luxembourg depositary has three missions: safekeeping the assets, monitoring the cash flows, and checking compliance with the law and the prospectus. Three missions, three impacts.

Monitoring the flows, first, because it is today's impact. The subscription no longer arrives by SEPA transfer, it arrives as a stablecoin (or a tokenised deposit, or tomorrow central bank money, reread the table of Part 5) in a wallet. Monitoring a cash flow now means being able to read a chain, which requires equipping oneself, and being in good regulatory standing. A regulatory point often misunderstood: tokenised fund shares are financial instruments, they are outside MiCA. A payment stablecoin backed by an official currency, on the other hand, falls under MiCA and enters the category of e-money tokens. If the depositary bank keeps them in custody for the fund, it enters the world of crypto-asset custody. For a credit institution, MiCA provides a simplified regime: not a new CASP authorisation, but a notification under Article 60. Although lighter, it still requires a notification with a supporting file, as well as adequate technology and governance.

Safekeeping the assets, next, and this is tomorrow's horizon. Who holds the keys to the fund's on-chain assets? The depositary, or a specialised sub-custodian under its responsibility. In practice, safekeeping an on-chain asset means, first of all, securing control of the keys that allow it to be moved. Here we are, back to the key that controls.

Checking, finally. Verifying positions and movements becomes more direct when the reference register is on-chain. Verifying that the smart contract really does what the prospectus says, on the other hand, is a new profession, and nobody has really written it yet.

New risk: loss of keys, hacking, and a legal question the marketplace has not finished settling: who answers if the sub-custodian loses the key?

4. The distributor: losing the register position



This is where our framework is most useful. Take Part 2 again. In Digital Twin, Distributor variant, the distributor keeps the sub-register: it knows who its clients are, it keeps their positions and it negotiates its retrocessions with that position in

hand. In native issuance, the investor is entered directly on the fund's register. The distributor no longer necessarily controls the register position. It loses exclusivity over the position data and, with it, a part of its power in the distribution chain. It is not the technology that threatens it, it is the architecture.

Concretely, from today, it has to equip itself to distribute tokenised shares (client wallets, on-chain onboarding), align its KYC with the fund's white list, and keep fulfilling its tax obligations, withholding tax for its investors for example, on positions that are no longer on its books.

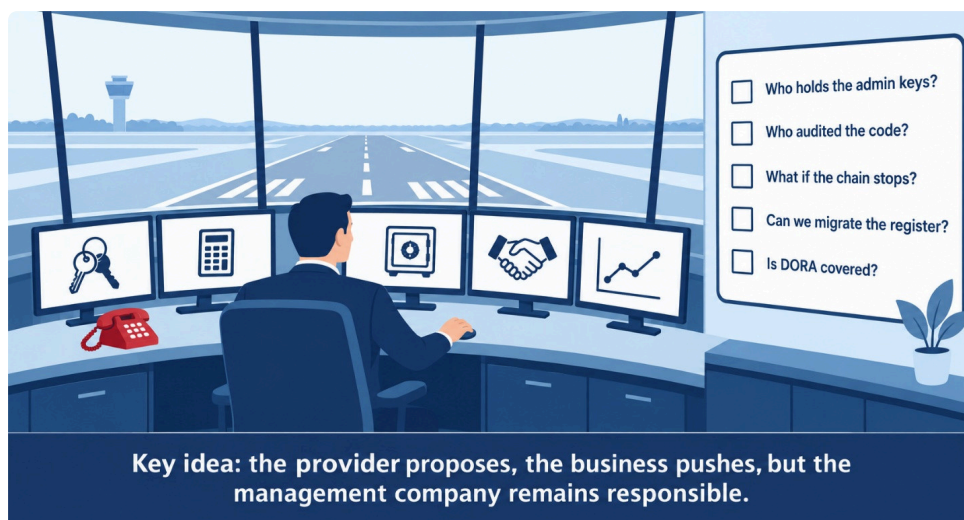
The threat has names. Kraken and Coinbase have millions of clients with a wallet already open and a KYC already done. In May 2026, Franklin Templeton signed with Payward, Kraken's parent company, to develop on-chain investment products, its tokenised money market funds included (CoinDesk, May 2026). These platforms already know how to onboard millions of clients, operate wallets and distribute digital assets. With tokenised securities, they naturally move closer to functions historically occupied by distributors and TAs.

Tokenisation also gives asset managers the ability to be in direct contact with their investors. No more intermediary in the distribution chain, so potentially fewer layers of fees. This is the case of Franklin Templeton's OnChain fund, and its Luxembourg fund provides for it in black and white in its prospectus: download the app from the App Store or Google Play, complete your onboarding, and you can subscribe directly to their product.

A word on transparency, since the subject comes up in every discussion. On a public chain, the flows and the number of shares in circulation are visible to everyone, under pseudonyms: addresses, never names. It is not the performance that is public, it is the assets and the movements, unless a confidential infrastructure of the Canton type is used (Part 4). For a distributor, knowing that the competition can read your inflows in real time is a small revolution.

And what about the TA in all this? TA and distributor now covet the same thing: the relationship with the register of the end investor.

5. The management company: responsible for everything, including what it does not understand yet



The great forgotten one. Since this is a “tech and TA” subject, the management company signs the contract and waits. Yet the first choice is its own: Mirror, Twin or Native? Which register counts? The keyring: it is the management company that decides who carries it. I wrote it in Part 4 and I write it again here: the provider proposes, the business pushes, but the management company remains responsible.

Concretely, this means understanding and challenging the choices of the technical provider, and above all exercising control over time. A reader asked me, in the comments of Part 2, how the chosen model is assured over time, and not only on the day it goes into production. Here is the list of questions I would ask. Who holds the administration keys of the smart contract? Who audited the code, and when? How do we make sure the token keeps the same rights as those described in the fund’s prospectus? What happens if the chain stops? Can the register be migrated elsewhere, and how long does it take? How do the technical providers involved enter the DORA register of ICT providers, and the resilience tests? DORA has applied since January 2025: using a blockchain infrastructure does not escape the requirements on ICT risk management, with one additional difficulty: a public chain has neither a service contract nor a service desk.

The rest follows: upskilling in risk management, compliance, portfolio management, IT and oversight, and acquiring new tools, reading a chain, monitoring a smart contract, which do not exist in the toolbox of a classic management company.

New risk: delegating without understanding. A key position in this new world, and I weigh the word.

6. The portfolio manager: faster, so fewer excuses



Although this player is entirely under the responsibility of the management company, I considered that it deserved a particular point of attention.

It seems counter-intuitive: how is the portfolio manager concerned by the tokenisation of the liabilities of the product he manages?

Yet, from today, the information arrives faster and more reliably: a subscription confirmed to the second, a redemption known instantly. The counterpart is less often told. The cash arrives faster, it has to be deployed faster; the redemption is settled faster, it has to be funded faster. Liquidity and market risk do not disappear, they come closer. Important nuance: fast settlement does not change the notice period in the prospectus. T+0 becomes possible, not compulsory, a product choice once again, and the Friday evening of Part 3 stays a Friday evening if the fund so decides.

What the portfolio manager gains in exchange: cash that can be deployed on-chain (tokenised money market funds are the first use of it) and collateral that can be mobilised without friction, the most mature use case of Part 3.

Tomorrow, when the assets are on-chain, part of the investment policy could be coded: automatic rebalancing, investment restrictions checked by the smart contract before each execution. Caution on this point, it is far away, and it is not a DeFi fund.

New risk: speed. Less latency to smooth things out, fewer excuses.

And the others, in three sentences. The paying agent sees its functions melt into the smart contract and the on-chain cash: it is the one that really disappears, or merges into the TA. The auditor inherits a natively time-stamped and much richer transaction trail, provided it can read a smart contract. The regulator discovers a register that could be supervised much closer to real time, an open question for the rest of the series.

7. My view (and it is mine alone)

Two convictions. The first: tokenisation is not a TA project, it is a project for the whole value chain, for every player. But the winner is the one who decides who holds the key, not the one who carries it, and that one is the management company.

The second is less comfortable for the marketplace. On the question “does the TA learn the tech, or does the tech learn the TA”, I lean towards the tech. An existing TA starts with a legacy system it has to make coexist with the chain, and teams that did not grow up with this technology. A tech player starts from a blank sheet, speaks the language of smart contracts natively, and learning compliance costs it less than rewriting a core system. The role of the TA remains indispensable, I showed it above. The holder of the role, however, is not guaranteed. This is not a fatality: the TA that gets going now, with real teams and not one more pilot project, keeps two advantages the tech does not have, the trust of management companies and its regulatory anchoring. But the window is closing.

8. Lucidity: what tokenisation does not change

First, the second horizon is prospective, and the market is still far from the first one. On 4 August, BlackRock launched “OnChain” share classes on six of its Irish money market funds, on Ethereum, with Kinexys, J.P. Morgan’s platform. And the legal register remains the one kept by the TA (Markets Media, August 2026). The largest asset manager in the world, in 2026, tokenises in mirror mode. For most players, the real impact today is small, and that is normal.

Second, regulatory responsibility does not move by a millimetre. KYC, anti-money laundering, prospectus, CSSF supervision: the chain answers none of these questions, it only changes the place where they are answered.

Finally, three risks run through all the players: key management, concentration on a few technology providers, and dependence on a public chain for which nobody is responsible (Part 4). The lost wallet and the transfers to freeze or reverse, which several readers asked me about, will wait for the end of the series.

Summary table

DEMYSTIFYING TOKENISATION · PART 6

Who does what tomorrow? Summary by player

Player	Today: liabilities + cash on-chain	Tomorrow: everything on-chain	New risk
Transfer agent	Validates before, reconciles less; technology provider	Operator of the register and of the interface with the assets	Key management, technology dependence
Central administration	Publishes the NAV on-chain (oracle)	More frequent / on-demand NAV, cut-off = product choice	The error moves from the human to the oracle
Depository	Monitors flows in wallets, MiCA framework / Article 60	Safekeeping of the keys to on-chain assets	Loss of keys, qualification of custody
Distributor	Equips itself, aligns KYC and white list	Loses exclusivity over position data in native mode	Disintermediation by crypto platforms
Management company	Chooses the model, oversight of the smart contract, DORA	The same, with more code to understand	Delegating without understanding
Portfolio manager	Faster information, cash to deploy faster	Investment policy partly coded	Speed: less latency, fewer excuses

Key idea: the register changes nature, the borders move, but responsibility does not disappear.

Conclusion

Tokenisation is often thought of as a TA matter. Looking closer, it is the whole value chain that moves, and it is logical: we are building a new infrastructure for finance, and everyone who plugs into it is transformed with it. Remember the formula: the register changes nature, the borders move, but responsibility does not disappear.

The next part of the series will leave the diagrams for the numbers: beyond the promises, where does the market really stand?

ABOUT THE AUTHOR

Let's continue the conversation

The series continues on LinkedIn, where each new part is published first. Questions and objections are welcome: that is what they are for.



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