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POSITION PAPER

Europe's Digital Finance Imperative: Strategic Autonomy in an On-Chain Financial Order

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Abstract

A founding position paper on why Europe's financial sovereignty will increasingly depend on its ability to shape on-chain settlement, tokenised assets, programmable money, and institutional digital finance architecture.

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Compact Brief

01 Core claim

Europe has regulatory depth, but strategic autonomy in digital finance will depend on whether European institutions help shape settlement, tokenisation, programmable money, and governance architecture.

02 Institutional signal

Asset managers, banks, central banks, and public institutions are already testing tokenised funds, deposit tokens, wholesale settlement, and programmable cross-border payment designs.

03 European gap

MiCA gives Europe legal clarity, but it does not by itself create euro-denominated on-chain liquidity, tokenised fund leadership, or architecture presence.

04 Recommended posture

Europe should combine open architecture, central bank money settlement, private innovation under clear rules, and active participation in protocol governance and global standard-setting.

Full Paper

Opening Position

Europe is entering a period in which financial sovereignty will be determined not only by fiscal capacity, monetary credibility, or regulatory depth, but by the architecture on which value itself is issued, transferred, financed, and settled. The financial system is not simply becoming more digital. It is beginning to reorganise around programmable settlement layers, tokenised claims, automated compliance, and private and public forms of digital money that can move through shared technical environments. For Europe, this is not a marginal innovation question. It is a strategic question about whether the next



generation of financial architecture will reflect European law, institutional standards, and monetary priorities, or whether European institutions will adapt after the decisive layers have been built elsewhere.

The Architecture Is Already Being Built

The transition toward on-chain financial architecture is no longer theoretical. It is visible in the behaviour of major asset managers, global banks, central banks, and public institutions. What began as a parallel market for digitally native assets is now developing into a set of settlement and issuance techniques that traditional finance can no longer dismiss as external to its own future. The relevant question is not whether regulated finance will use public or private distributed ledgers in every case. It will not. The question is whether financial claims, collateral, cash legs, identity credentials, and compliance rules increasingly become machine-readable and transferable across programmable environments. On that question, the direction of travel is already clear.

BlackRock's BUIDL fund, launched in March 2024 as the firm's first tokenised fund issued on a public blockchain, gave institutional tokenisation a reference point that was difficult to ignore. Its significance was not that it made a money market strategy novel. Its significance was that a familiar institutional product could be represented and administered through tokenised ownership, with transfer, subscription, redemption, and distribution processes redesigned around digital rails. Franklin Templeton's Franklin OnChain U.S. Government Money Fund had already demonstrated that a U.S. registered fund could maintain official share ownership records through a blockchain-integrated system, with one BENJI token representing one fund share. These examples matter because they show tokenisation moving through regulated wrappers rather than around them.

The banking layer is moving in parallel. J.P. Morgan's Onyx platform, now Kinexys by J.P. Morgan, has processed institutional payment and asset transactions at a scale that makes it part of the architecture conversation rather than a laboratory exercise. The bank reports more than 1.5 trillion dollars in notional value processed across Kinexys since inception and more than 2 billion dollars in average daily transaction volume. Its 2025 work on deposit tokens, including JPMD on Base as a proof of concept for institutional clients, shows how the boundary between permissioned bank ledgers and public blockchain environments is becoming more porous. The importance is not branding. It is the convergence of bank money, tokenised deposits, collateral mobility, and near-continuous settlement.



Central banks are also testing the architecture. BIS Project Agor' brings together seven central banks and the private sector to explore how tokenised commercial bank deposits and tokenised wholesale central bank money might operate on a programmable public-private platform for cross-border payments. BIS Project Mariana tested automated market-maker concepts for hypothetical wholesale CBDC foreign exchange settlement involving the euro, Swiss franc, and Singapore dollar. These projects are experimental, and they do not imply endorsement of any particular technology. They do, however, reveal that the official sector is studying concepts that emerged from decentralised finance because the design space has become too important to leave unexamined.

Within Europe, the Eurosystem's exploratory work on wholesale settlement using distributed ledger technology has been particularly important. Between May and November 2024, the Eurosystem processed more than 200 transactions with a total value of 1.59 billion euros across trials and experiments involving central banks, market participants, and DLT operators. The work included actual settlement in central bank money and mock-settlement experiments, with use cases such as delivery-versus-payment for bonds and lifecycle management for securities. This is precisely the terrain on which Europe's existing strengths in settlement architecture, including TARGET2-Securities and Euroclear, must meet the next generation of programmable markets.

Europe's Regulatory Head Start and Strategic Lag

Europe should acknowledge the scale of its regulatory achievement. The Markets in Crypto-Assets Regulation created the first comprehensive digital asset framework among major jurisdictions. Its provisions for asset-referenced tokens and e-money tokens began applying on 30 June 2024, and the broader framework applied from 30 December 2024. MiCA gave Europe a common legal vocabulary for issuers, service providers, disclosure, conduct, and supervision. It reduced the fragmentation that had previously pushed digital asset activity into a patchwork of national regimes. That is not a minor accomplishment.

Yet regulation is not strategy. A jurisdiction can define the rules of market access while still failing to shape the architecture on which the market will operate. MiCA tells institutions how digital asset services may be offered in Europe. It does not by itself ensure that tokenised funds, settlement layers, stablecoin liquidity, or protocol governance mechanisms develop under European leadership. It does not make European asset managers first movers in tokenised fund structures. It does not guarantee that euro-denominated instruments become central to on-chain collateral markets. It does not ensure that European commercial banks have credible deposit-token or programmable-payment strategies. It is a foundation, not a posture.



This distinction matters because the architecture layer is being shaped by actors with capital, technical capacity, and institutional urgency. U.S. asset managers are proving tokenised Treasury and money market products at scale. U.S. banks are building deposit-ledger architecture and experimenting with public-chain issuance. The United States enacted the GENIUS Act in July 2025, establishing a federal stablecoin framework that strengthens the legal pathway for dollar-denominated payment stablecoins. Asian financial centres continue to run active experiments in tokenised deposits, wholesale CBDC, and cross-border settlement. Europe has the regulatory language. It must now decide whether it wants architecture presence.

What Strategic Autonomy Means in a Digital Financial Order

Strategic autonomy is often discussed through defence, energy, cloud architecture, semiconductors, and critical minerals. It should also be discussed through financial settlement. Europe learned through energy dependency that architecture is never neutral when it is controlled elsewhere. It learned through semiconductor supply chains that capacity can become a geopolitical constraint long before a formal crisis arrives. Financial architecture carries the same logic. The legal system governing settlement, the currency denomination of liquidity, the technical standards for identity, and the governance of protocols all shape the degrees of freedom available to European institutions.

If Europe's institutional digital finance activity settles primarily through foreign platforms, foreign stablecoins, foreign custodial standards, and foreign protocol governance, Europe may retain formal regulatory authority while losing practical influence over the architecture stack. A euro area bank can comply with European rules while still depending on dollar-denominated on-chain liquidity for settlement. A European asset manager can issue a tokenised fund while relying on non-European distribution architecture and custody assumptions. A public institution can study tokenisation while the market converges around standards set by others. In each case, the question is not legal permission. It is architectural agency.

The stablecoin issue is particularly acute. Dollar-denominated stablecoins are already the dominant settlement asset across crypto markets and many on-chain applications. A U.S. federal framework for payment stablecoins gives that dominance a clearer legal channel. For Europe, this does not require hostility to dollar instruments, nor should it invite artificial protectionism. It requires a sober assessment of what happens if programmable finance develops with the euro structurally underrepresented. Monetary sovereignty is not only about the ability to issue central bank money. It is also about



whether the currency remains useful in the settlement environments where financial activity is moving.

The digital euro is part of the answer, but it is not the whole answer. The ECB's project has moved beyond its initial investigation phase, and by late 2025 the Eurosystem had advanced to a new phase aimed at technical readiness, with possible pilot activity from 2027 and potential issuance readiness in 2029 if legislation is adopted. That work is necessary for European payment resilience and monetary anchor credibility. But a retail digital euro does not by itself address tokenised collateral, wholesale securities settlement, euro-denominated stable-value instruments, institutional fund tokenisation, or protocol governance. Europe needs a broader digital finance strategy that includes, but is not exhausted by, central bank digital currency.

The Institutions That Must Act

European commercial banks need to treat digital settlement as a balance-sheet and architecture question, not as a retail crypto adjacency. Deposit tokens, programmable payments, tokenised collateral, and settlement interoperability may affect liquidity management, treasury operations, correspondent banking, and capital markets activity. Not every bank needs to build a blockchain platform. Every serious bank needs a view on where bank money, central bank money, and stable-value private instruments will sit in programmable markets.

European asset managers face a different but equally direct challenge. Tokenised funds are no longer a conceptual exercise. They are live products administered by global firms. The question for European managers is whether they will use MiCA, UCITS and AIF structures, fund administration expertise, and European custody standards to create credible euro-denominated products, or whether they will let tokenised liquidity develop mainly around U.S. Treasury exposure and dollar rails. The Capital Markets Union, now reframed through the Commission's Savings and Investments Union agenda, is fundamentally about mobilising European capital more effectively. Tokenised issuance and distribution will not solve that problem alone, but they could become part of a more integrated market architecture if European institutions engage early enough.

Central banks must continue to examine wholesale settlement with the seriousness the Eurosystem has already shown. The 2024 exploratory work demonstrated that central bank money settlement can be tested against DLT-based market activity in concrete use cases. The next step is not rhetorical enthusiasm. It is disciplined design around interoperability, legal finality, operational resilience, and the conditions under which



regulated financial market architectures can use new settlement rails without fragmenting risk management. Europe already operates sophisticated systems such as T2S. It should not wait for a separate on-chain settlement order to mature before asking how central bank money belongs inside it.

Pension funds, insurers, and institutional allocators should also develop internal literacy. Their role is not to chase digital assets. It is to understand how tokenisation may affect collateral mobility, fund liquidity, market access, custody risk, and operational due diligence. Regulators, for their part, must resist the temptation to treat implementation of MiCA as the end of the analytical task. Supervisory competence will increasingly require understanding protocol governance, smart contract control, oracle dependency, validator concentration, bridge risk, tokenised asset servicing, and the difference between settlement automation and legal finality. The cost of waiting is structural because architecture standards, once adopted, are difficult to dislodge.

A European Path Forward

A European path forward begins by treating digital finance architecture as a domain of strategic autonomy. This does not mean building closed European systems for their own sake. Europe's historical strength has often been the construction of neutral, rules-based, multilateral architecture. The task is to bring that tradition into programmable finance. Europe should aim to shape standards for tokenised settlement, disclosure, custody, identity, governance, and central bank money interoperability in ways that are open enough for global relevance and robust enough for public trust.

The European official sector should continue wholesale central bank money experimentation and move from isolated tests toward clearer pathways for market architecture integration. The EIB and EIF should examine on-chain issuance not as publicity but as part of a broader question about sovereign and public-sector debt markets, investor access, lifecycle automation, and settlement transparency. The EIB's 2021 digital bond on Ethereum showed that public institutions could participate in tokenised issuance early. The next phase should connect issuance experiments to a coherent European view of market architecture.

European asset managers should use the regulatory clarity of MiCA and the depth of European fund law to lead in tokenised fund structures. The opportunity is not to copy U.S. Treasury tokenisation with a delay. It is to create European instruments that combine legal robustness, euro-denominated exposure, transparent administration, and operational compatibility with institutional settlement systems. A tokenised fund is not



valuable because it uses a distributed ledger. It is valuable if ownership, transferability, collateral use, reporting, and redemption become more efficient without weakening investor protection.

European institutions should also participate more seriously in protocol governance and international standard-setting. Public blockchain networks are increasingly governed by foundations, developer communities, validators, token holders, service providers, and institutional users. If European institutions use these networks without participating in their governance debates, they accept standards passively. Participation does not require ideological alignment with decentralisation. It requires recognition that open financial architecture will shape market practices even when regulated firms access it through permissioned interfaces.

Finally, Europe needs a coordinated language in global forums. The BIS, CPMI, IOSCO, the Financial Stability Board, and standard-setting bodies will continue to shape the rules around tokenisation, stablecoins, digital money, and financial market architectures. Europe should bring to those discussions a position that is technically literate and strategically coherent. It should defend central bank money as a settlement anchor, support private innovation under clear rules, and insist that digital finance architecture remains interoperable, resilient, and accountable.

Europe has often been strongest when it has converted legal sophistication into institutional architecture. It built payment and settlement systems, supervisory frameworks, and market rules that gave depth to the single market and credibility to the euro. The same discipline is now required for on-chain finance. If Europe only regulates the perimeter while others build the rails, it will find itself adapting to a financial order in which sovereignty is formally preserved but operationally constrained. If it engages now, with seriousness and without illusion, it can help shape digital finance as architecture rather than spectacle. The European Sovereign Institute for Digital Finance exists to advance that work, to give institutional Europe the research, language, and strategic clarity needed to act before the architecture hardens.

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