



Tokenization, AI & Capital Markets

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This is our quarterly update on digital assets. Please refer to the end of this article for a set of useful resources and links to past publications.

Summary

Tokenization and artificial intelligence are likely to reshape capital markets, much as ETFs and electronic trading transformed asset management and financial infrastructure. However, the speed and fragmentation associated with tokenized trading introduce new risks that will require international co-ordination to manage.

Main points

Tokenization could gain institutional acceptance once the US CLARITY Act passes, given the proven nature of blockchain technology

Tokenised platforms offer faster speed, lower cost and improved liquidity compared to traditional platforms.

Tokenized asset markets could grow to USD 5.6 to 9.3trn by 2030.

Besides Ethereum, Solana's peer-leading transaction speed makes it well suited for high-frequency applications and tokenised assets trading.

Tokenisation changes the nature rather than the quantity of systemic risk.

Countries continue to take a differentiated approach towards CBDCs

TOKENIZATION: THE NEXT ERA OF CAPITAL MARKETS

The convergence of tokenization and artificial intelligence is reshaping the foundations of capital markets. Just as ETFs and electronic trading expanded market access and transformed financial infrastructure, tokenization is creating a new digital representation of value, while AI is enabling increasingly autonomous decision-making capabilities. Together, these technologies could redefine how assets are issued, traded, financed, and managed in the year ahead.

Technological breakthroughs alongside institutional buy-in

Digital technology has transformed nearly every aspect of modern life since the 70s, and **capital markets should be no exception as blockchains become more powerful and capable**. Blockchain technology enables the tokenization of money and real-world assets (RWA), allowing for digital representations that can be transferred, traded, and managed with greater efficiency. (see [Embracing tokenization and stable coins](#), 2025). In doing so, it has the potential to usher in a more democratized, Web3 capital market ecosystem (see [Post euphoria](#), 2025) that were previously impractical or impossible to achieve.

Blockchains' capabilities as a settlement and custody platform for token transactions is now no longer questioned. While there were doubts over blockchains' limited transaction throughput years ago, innovation since then has changed the landscape. Ethereum is planning for upgrades that will allow Layer-1 throughput of 10,000 TPS (or 864m transactions per day) by 2029, with a record 3.6m actual transactions lodged on in April 2026. Layer-2 networks, which process transactions off chain before settling back to the base Ethereum network, allows even more transaction scaling, with a record of 2.48bn transactions per day already done (GrowThePie, 2026). Solana, a newer blockchain launched in 2020, has in-built L1 capabilities to handle a theoretical 65,000 TPS (or 5.6bn transactions per day, with its daily transactions having hit an all-time high of 171.9m in August. Given their combined L1 and L2 throughputs today, both Ethereum and Solana are already capable of processing all credit card payments globally, which is estimated at around 2.2bn transactions per day (StatsPanda, 2026). Equally important, **there have been no service failures or compromises to the integrity of Bitcoin and Ethereum even after a decade of operations**, proving their soundness for transactions and custody.

While the technology itself is no longer a constraint, **there remains the question of whether institutions will buy into crypto-based tokenized assets, including stablecoins** (tokens representing fiat money). Historically, hurdles for acceptance of tokenized assets have been due to a lack of legal status, regulatory ambiguity, and a limited institutional ecosystem. But with Trump having declared that he will make the US the "crypto capital of the world", significant changes are now afoot that will turn the roadblocks into catalysts for adoption.

Passage of the GENIUS Act in the US last year have given stablecoins legal recognition and regulatory safeguards. Next up is the CLARITY Act, which provides legal clarity around security and commodity tokens, and a regulated environment for tokenized asset trading in the US. The CLARITY Act will make clear the mandates for regulatory agencies including the SEC and CFTC, closing the chapter on enforcement actions against crypto firms due to uncertainties around legal interpretation. **The Senate has recently announced a cloture vote on the CLARITY Act in mid-September, and there remains a short window for the law to pass before the mid-terms.** Successful passage of the CLARITY Act will usher in an era of decentralized financial applications and could also provide impetus to other countries to draw up their own regulatory frameworks for newly emerging tokenized asset markets.

The institutional ecosystem for tokenized markets is still nascent for now, but major financial institutions are already experimenting with tokenized assets that are compliant with securities law. In the US, asset managers such as Blackrock have launched tokenized money market funds that operates across both Ethereum and Solana.

Financial market infrastructure providers have also executed trades using tokenized securities, with the Depository Trust & Clearing Corporation (DTCC) announcing in July (that it has successfully converted assets held by at the Depository Trust Company (DTC) into tokens that were used in real production trades (Tradeweb, 2026). These transactions occurred on a private permissioned network using the Ethereum-compatible HyperLedger Besu, with DTCC set to launch its Tokenization Service in October 2026. Fungibility with traditional securities is a key feature, with tokenized securities sharing the same CUSIP, resulting in a consolidated TradFi (traditional finance) and DeFi (decentralized finance) liquidity pool.

The NYSE has also announced the development of a trading platform for tokenized securities, equipped for 24/7 operations, instant settlement, fractional share trading, and stablecoin-based funding (Intercontinental Exchange, 2026). Longstanding features of crypto token exchanges are now finally set to be introduced to traditional security exchanges.

Beyond the obvious: uncovering the full potential of tokenized assets

Some may ask whether tokenized securities will bring additional benefits for capital markets that are already so highly digitalised today. That may be so, but it is worth noting that despite the rapid growth of electronic trading since the 1990s, there are still major inefficiencies and problems around: (1) settlement timing, (2) operational costs, and (3) limited market access and liquidity for assets like private equity.

Tokenisation and tokenized markets on blockchains introduce several unique features that can help address these frictions by enabling faster transactions, reducing operational overheads, and improving capital efficiency. We summarize the key differences and advantages between tokenised and traditional market infrastructure in the table below.

Characteristics	Traditional Platform	Tokenised
Transaction structure	Multiple intermediaries to handle various processes	Smart contracts to replace intermediaries
Settlement Time	T+1/T+2	Almost immediate
Transaction costs	0% (US equities) - 4% (private equity)	0.02% (tokenised stock) – 2% (tokenised private equity)
Liquidity	Up to 13-hour trading, only on working day (Nasdaq, effective 6 Dec 26)	24/7 trading inclusive of weekends and public holidays
Min trading size	Up to USD1m for private equity	As low as USD10k for private equity

Source: DBS estimates

To forecast the future of tokenized markets, it is worth looking at the past and asking why DeFi gained the lead over TradFi across so many areas. Cryptocurrencies being internationalized by nature and thus having no local time zones helped. Asset transfer and settlement happening simultaneously on the blockchain rather than separated between exchanges and security depositories also gave rise to atomic settlement. But they do not explain why innovation such as perpetual futures (or perps) for oil came to DeFi first. Oil perps have proven its utility to investors during the recent US-Iran conflict, with strikes and negotiations outcomes often announced on weekends after markets closed. Interestingly, perpetuals or continuous futures markets had been proposed as early as the 1990s by Shiller (1993), but this important idea in financial economics had to await the booming crypto trading markets of the late 2010s to be brought to fruition.

We would argue that the emergence of important commodity perps and frivolous memecoins alike in DeFi are reflecting the same characteristics of blockchains which are missing in traditional finance. They are the power of abstractions secured primarily by logic, freely accessible markets with zero barriers, incredible ease of use and customisability of digital token protocols, and full open-source standardization and interoperability.

In a nutshell, these features of the blockchain eco-system mean that anyone well-versed in digital technologies can create a token based on any asset or event without barriers, introduce them to decentralized markets at low cost, and see if these prove useful to markets. Of course, there could be many tokens of questionable utility, but the broader point is the possibility of everyone being able to bring their ideas to digital markets in a way that was not possible before. Capital markets will move ever closer to the ideal of a democratization of finance that is often cited by DeFi proponents. Capital raising is likely to be completely changed by a tokenized financial system, where no asset is too illiquid, too unconventional or too costly to be tokenized.

Investment opportunities are also set to be more abundant. The emergence of index funds in the 1970s, and the modern S&P500 ETF in 1993, helped ordinary investors gain easy access to financial markets. But the one-size-fits-all nature of ETFs is inherently limited, since investment needs will change with time and circumstance. Tokenized securities could offer the same prospects of easy access and low transaction costs like ETFs, but with greater room for automated rule-based customization regardless of investment amount due to fractional trading and custody.

Who Will Drive Tokenized Markets: Humans or AI?

A potentially game-changing development for tokenized asset markets is autonomous transactions by AI agents. Given the lack of regulated tokenized asset markets with significant price volatility, the trading capabilities of AI can only be glimpsed in memecoin markets. Pump.fun, a memecoin generation platform that drives 40-67% of transactions on Solana according to Mancino (2025), had introduced a “Tokenized Agents” feature in March this year. The feature allows issuers to instruct AI agents to conduct automated token buybacks using revenues generated through Solana wallet integration. As memecoin markets are essentially zero-sum games, any success of AI must come at the expense of human participants. The introduction of these AI agents soon brought unexpected complaints of creating excessive and harmful competition to markets, with pump.fun choosing to deprecate its Tokenized Agent feature by June (CryptoBriefing, 2026).

This marks an early and relatively niche use-case of AI in tokenized markets, but it has demonstrated **how easily AI agents can be connected to digital wallets and blockchain networks, as well as their ability to compete with humans in markets.** In tokenized markets, it could be possible to request AI agents to plan and undertake token investment decisions, execute block trades to minimize market impact across multiple trading venues, or to trade at machine speed in reaction to news. These capabilities are currently available only to professional investors, but AI could soon level with human intelligence at these tasks, granting these invaluable capabilities to a wider group of investors.

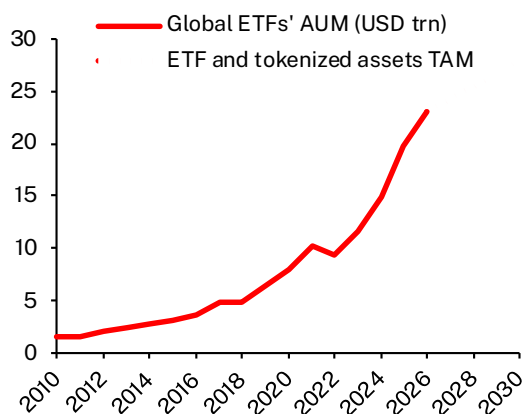
SIZING TOKENIZED ASSET MARKETS IN 2030

The promise of tokenized assets is undoubtedly large, but current active market cap of real-world assets on chain is still small at just USD31bn, according to DefiLlama data as of August 2026. Unsurprisingly, bonds (largely US treasuries) and precious metals comprise the largest share of assets at over 70%, with equities and credit still very limited due to uncertainties around US security law. However, if the CLARITY Act successfully passes in the US and opens the slate of available tokenized assets, how big could the market grow? Excluding stablecoins and cryptocurrencies, **we expect the tokenized asset market size could come in between USD 5.6trn to 9.3trn in 2030.**

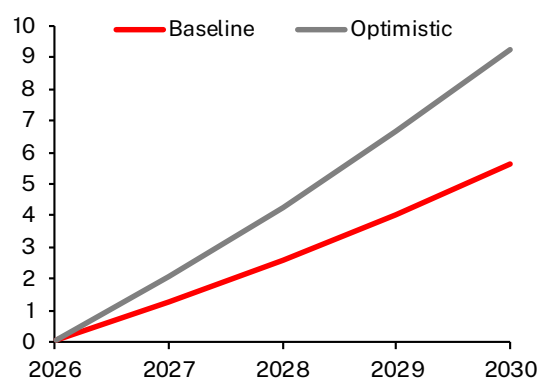
For our analysis, we assume that there is full regulatory rules alignment for tokenized assets around the world by 2030, which means equal treatment across both traditional and tokenized securities. We also expect post-quantum cryptography (PQC) to have been introduced on all tokenized blockchains to reinforce security in the age of quantum computing (see [Quantum Risks and Market Shifts](#), 2025), and that state-of-the-art AI capabilities will improve and become more deeply embedded in blockchain ecosystems.

We expect current ETF investors to be the first adopters of tokenized assets, given tokens' similarities to multi-asset ETFs (and single-stock ETFs) in terms of product characteristics, on top of additional crypto-native benefits such as 24/7 trading, AI-driven investment and trading capabilities, individually customizable portfolios, and stablecoin-collateralized funding. For this reason, we expect that the mix of tokenized assets will closely resemble the asset mix of ETFs. We have excluded niche tokenized assets, such as event prediction tokens, open-source software tokens, and perps, but they can provide further upside to our market size estimates if they evolve into significant markets over time.

Global ETF assets reached a record USD23.11trn as of July 2026 and have recorded an astonishing 10Y AUM CAGR of 20.6, according to ETFGI (2026). Given elevated market valuations now, we conservatively assume that global ETFs/tokenized assets' Total Addressable Market (TAM) will grow at a modest CAGR of 5% until 2030, which translates to a market size of USD28trn. Tokenized assets could increase their market share by 5% every year from 2026 to reach 20% of the TAM in 2030, amounting to USD5.6trn. In a more optimistic scenario, adoption of tokenized assets could be faster with market share growth of 8% per year, reaching 33% of the TAM in 2030 (or USD 9.3trn).

Total addressable market size for ETFs and tokenized assets (USD trn)

Source: ETFGI, DBS

Forecast Growth Trajectory of Tokenized Asset Markets (USD trn)

Source: DBS

Traditional securities could remain the mainstay of institutional investors, who enjoy an established network of advisors, prime brokerage services, and have privacy requirements that are difficult to fulfil by public blockchains. Still, an improvement in secondary market liquidity from tokenized asset markets will be welcome and could support some institutional allocations to tokenized securities.

SOLANA: AN ALTERNATIVE FOR TOKENIZED TRADING

Solana was conceived in 2018 to tackle the problem of slow transaction rates for Bitcoin and Ethereum. There are key characteristics specific to Solana that differentiates it from the current mainstream cryptocurrencies – Bitcoin and Ethereum.

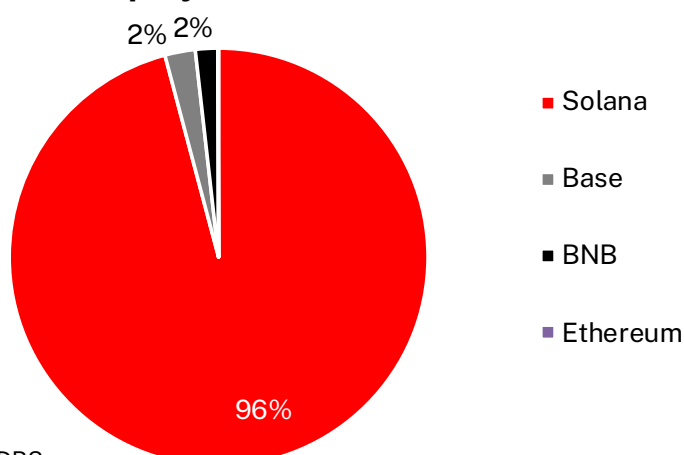
Solana is often compared with Ethereum given their many similarities, but the two networks differ in their primary focus. Ethereum prioritises security and decentralisation, while Solana is designed for speed, scalability and low transaction costs. Although this comes with certain trade-offs, Solana's superior throughput and efficiency make it well suited for high-frequency applications such as tokenised securities trading.

	Solana	Ethereum	Bitcoin
Main purpose	High frequency transactions such as trading	Stable and secured systems	Store of value due to scarcity
Consensus Mechanism	Proof-of-History (sequenced validation)	Proof-of-Stake (validation)	Proof-of-Work (computation)
Staking support	Yes	Yes	No
Smart Contracts	Very powerful	Very powerful	Limited
Speed	600-700TPS (maximum 65k TPS)	15-30TPS	3-7TPS
Fees	USD0.00025, even during high load periods	USD0.0017 – USD0.0499	USD0.20-USD0.26
Monthly Active Full-time Developers	~670	~2,718	~825

Source: CoinTracker. Electric Capital. DBS

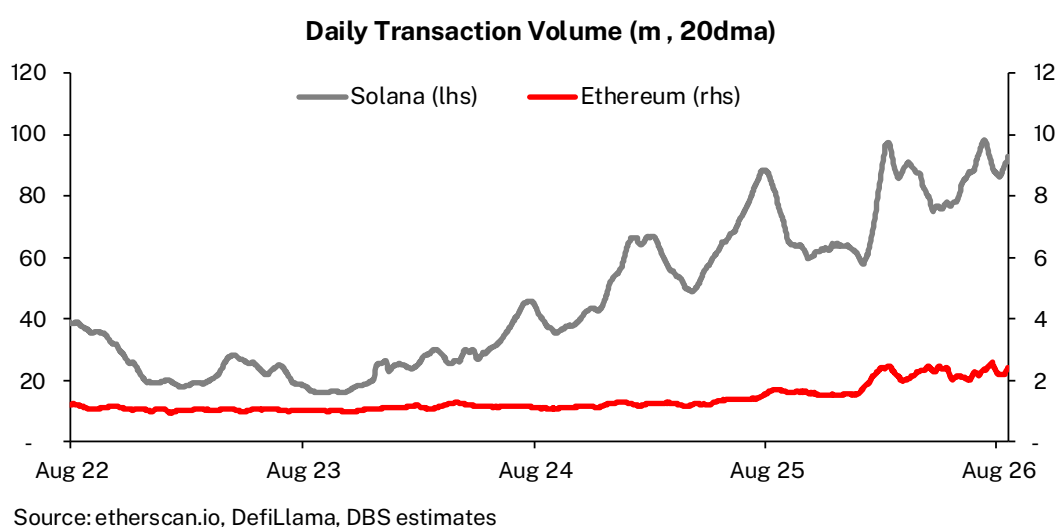
Unsurprisingly, Solana had captured 95.6% of the tokenised equity market in June. We believe it is well positioned to maintain its leadership, as no other major blockchain network currently offers a comparable combination of speed, scale and cost efficiency.

Tokenised equity volume share in June 2026



Source: Trading View, DBS

The Solana network went live in Mar 2020, with its native token initially sold at USD0.95 and subsequently reaching an all-time high of USD293 in Jan 2025. While the token has since retraced to around USD79 as of mid-Aug 2026, there is significant potential given its role as the fuel powering Solana network transactions. This value proposition is supported by the network's strong growth in users, developers, and transaction volumes over the past few years. As a reference, Solana's daily transaction volume has reached as high as ~44x of Ethereum in mid-Aug 26.



IMF ON TOKENISATION

The IMF had published a paper on [Tokenized Finance](#) in April 2026, which we summarise here:

Tokenisation is a structural shift in financial architecture, not merely an efficiency upgrade

The paper argues that tokenisation fundamentally changes where trust and risk reside in the financial system. Unlike earlier waves of digitisation that improved existing processes, tokenisation embeds ownership, settlement, compliance, and contractual execution directly into programmable assets on shared ledgers. This allows delivery-versus-payment, collateral management, margining, and corporate actions to occur automatically through smart contracts, compressing multiple layers of intermediation into a single workflow.

The result is a migration of risk away from institutional balance sheets and toward infrastructure, code, and governance frameworks. For banks and capital markets, the key implication is not disintermediation but a reconfiguration of liquidity management, risk monitoring, and settlement processes around continuously operating, real-time infrastructure. While counterparty exposures decline through atomic settlement, intraday liquidity demands rise materially, requiring new approaches to liquidity provision and oversight.

Speed, concentration, and fragmentation pose financial stability risks

The note emphasises that tokenisation changes the nature rather than the quantity of systemic risk. Continuous settlement removes traditional buffers such as settlement lags, batch processing, and end-of-day netting, limiting the time available for institutions and authorities to respond during periods of stress. Automated margin calls, collateral transfers, and redemption mechanisms can accelerate liquidity shocks and reinforce procyclical dynamics.

At the same time, the growing reliance on permissioned shared ledgers creates concentration risks, where critical infrastructures become single points of failure. Cross-border tokenised systems further complicate supervision and crisis management because transactions, collateral, and settlement can move across jurisdictions at machine speed, often without a clear geographic anchor. For emerging markets, these risks are particularly acute, as tokenised capital flows and dollar-denominated stablecoins could amplify capital flight, currency substitution, and pressures on monetary sovereignty.

Public trust, safe settlement assets, and international coordination will determine outcomes

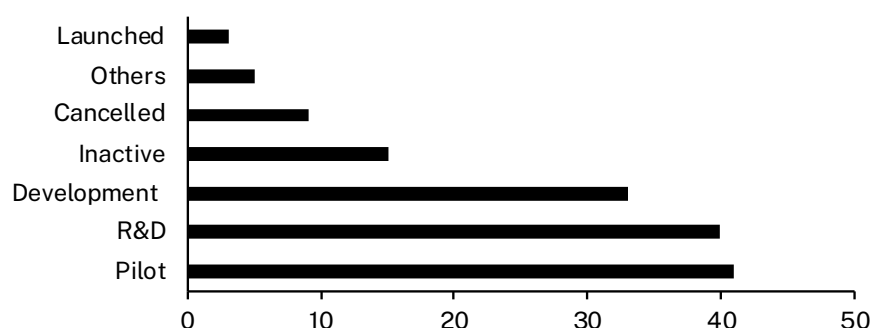
The IMF's central policy message is that tokenisation's benefits will depend on whether digital financial activity remains anchored in public trust. The preferred architecture is one where tokenised markets settle using the safest available assets, such as wholesale CBDCs or tightly regulated tokenised deposits, preserving the "singleness of money" and confidence in par convertibility. Legal certainty over ownership rights, settlement finality, and the enforceability of smart contracts is seen as essential for scaling beyond pilot projects.

Equally important are interoperability standards and cross-border coordination to prevent liquidity fragmentation across competing networks. The paper outlines a policy roadmap centred on safe settlement assets, globally consistent regulatory treatment, legal clarity, interoperability, and modernised liquidity backstops. In effect, tokenisation does not reduce the role of central banks and regulators; rather, it elevates their importance as providers of trust, liquidity support, and governance in an increasingly automated financial system.

CENTRAL BANK DIGITAL CURRENCIES (CBDC)

Countries continue to take a differentiated approach towards CBDCs. China is deepening integration of the e-CNY into the banking system, while Europe is in midst of conducting pilots and advancing towards implementation readiness. US has effectively ruled out a retail CBDC for the foreseeable future. Meanwhile, many other jurisdictions are concentrating on targeted use cases such as programmable payments, wholesale settlement and cross-border connectivity. The discussion has therefore shifted from the question of whether CBDCs should exist to how they can best serve specific policy and payment-system objectives.

Progress on CBDCs - Atlantic Council tracker (nos.) - May2026



Source: Atlantic Council, DBS

China

Developments in China was discussed in detail in our last publication for 1Q26. To recall, the most significant development this year was the introduction of a new framework, effective from January 2026, that transitions the e-CNY from a digital cash-like instrument towards a form of digital deposit money. Under the new arrangement, e-CNY balances held in commercial bank wallets can be treated as deposit liabilities, receive interest payments and benefit from deposit insurance protection. Authorities have described the reform as the next stage in the digital yuan's evolution following years of domestic and cross-border testing.

The network of institutions participating in the e-CNY ecosystem has been further expanded. Following an initial expansion earlier in the year, the PBOC added a further eight banks in Aug26, bringing the number of authorised digital yuan operators to 30. The expansion is intended to improve access among regional banks, SMEs and cross-border trade participants, while supporting broader adoption across the financial system. **Authorities continue to promote the use of e-CNY in retail payments, public services and cross-border transactions.**

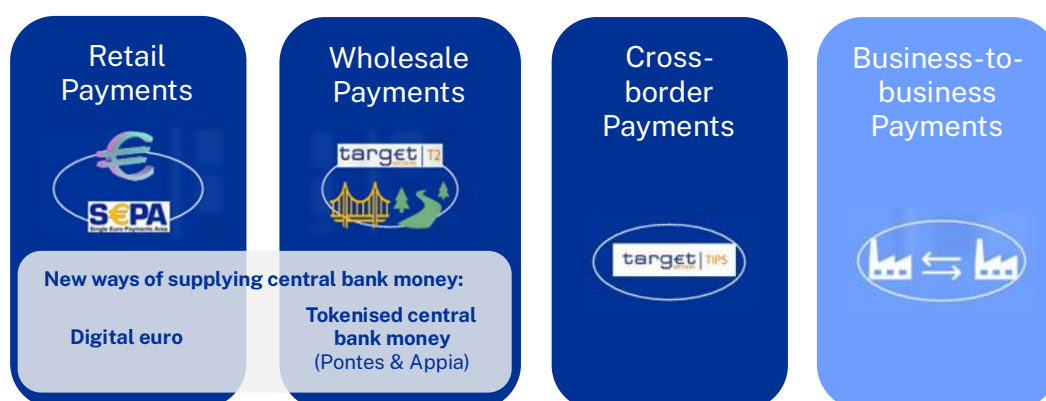
Euro Area

The euro area's focus in 2026 will be on preparing for a potential future issuance of the digital euro. Technical preparations are advancing while legislative discussions continue within the EU. Policymakers increasingly frame the digital euro as a strategic initiative aimed at strengthening European monetary sovereignty, reducing fragmentation in payments, and lessening dependence on foreign payment networks.

Operational preparations have moved forward during the year. In July, the ECB (2026) selected 36 payment service providers to participate in a digital euro pilot programme, an important step towards testing the currency's technical functionality and user experience. The pilot aims to support the ongoing preparatory work for the potential issuance of a digital euro, and is due to start during the second half of 2027 for a year. The pilot will utilize a beta version of the digital euro that closely mirrors the functional and technical specifications outlined in the draft legislation, although it will not be granted legal tender status.

Separately, the Eurosystem confirmed plans to launch "Pontes", a distributed-ledger settlement solution for tokenised financial transactions, in 3Q26. These initiatives signal an increasing focus on both retail and wholesale applications of central bank money in a digital environment. The ECB had launched two initiatives in 2025 – Pontes and Appia, which were to ensure that the central bank remains the main anchor of the financial system and also support innovation around the infra layer under tokenised financial assets as well as wider digit asset ecosystem.

Eurosystem payments strategy – overview



Source: [ECB](#), June 2026

US

Developments in the US are still cautious and gradual. Rather than advancing a retail CBDC, policymakers have increasingly favoured private-sector digital payment solutions, particularly regulated dollar-backed stablecoins. The policy shift culminated in 2026 legislation that prohibits the Federal Reserve from issuing a publicly available retail CBDC through at least 2030. The move converts earlier policy preferences into a statutory restriction and **significantly reduces prospects for a US retail CBDC in the near term.**

The debate has consequently shifted towards the regulation and development of private digital dollars, via stablecoins like USDC, USDT, and the new entrants, while the government assumes the role of a regulator and not a competitor/participant. Policymakers have argued that innovation in digital payments can be delivered through regulated private issuers rather than via a central bank-issued retail currency. As a result, the US is emerging as a notable outlier among major economies by explicitly distancing itself from the retail CBDC model.

India

In its annual report for 2026-27, the RBI said it plans to explore bilateral and multilateral cross-border central bank digital currency (CBDC) pilots this year, as it widens experiments around digital payments, asset tokenisation, and programmable money. There are plans to expand CBDC use cases into welfare payments, direct benefit transfers and programmable subsidy schemes. Several pilots conducted with state and central government agencies explored how programmable CBDCs could improve targeting and utilisation of public funds. RBI data cited by the press showed the value of bank notes in circulation in digital form CBDC-retail (e₹-R) had moderated to INR 7.7bn as of Mar26 vs INR 10.2bn in Mar25.

Concurrently, the RBI has also deepened engagement with foreign central banks on CBDC-linked payment infrastructure. Authorities have been in discussion with 4-5 countries, in Asia as well as Europe, to develop cross-border CBDC transaction rails for wholesale and retail payments.

References

- Crypto Briefing. (2026). [Pump.fun kills Tokenized Agent launch option after community pushback over PVP dynamics](#)
- DBS Group Research. (2025). [Digital Assets Update 1Q25: Post euphoria](#)
- DBS Group Research. (2025). [Digital Assets Update 3Q25: Embracing tokenization and stablecoins](#)
- DBS Group Research. (2025). [Digital Assets Update 4Q25: Quantum Risks and Market Shifts](#)
- European Central Bank. (2026). [ECB selects 36 payment service providers to join digital euro pilot](#)
- European Central Bank. (2026). [Central bank money for the digital era](#)
- ETFGI. (2026). [ETFGI reports Global ETF Industry Assets Reach Record US\\$ 23.11 Trillion at the end of July and YTD Inflows Hit All-Time High US\\$ 1.71 Trillion](#)
- GrowThePie. (2026). [Ethereum Ecosystem Metrics](#)
- IMF. (2026). [Tokenized Finance](#)
- Intercontinental Exchange. (2026). [The New York Stock Exchange Develops Tokenized Securities Platform](#)
- Mancino, D. (2025). [The Memecoin Phenomenon: An In-Depth Study of Solana's Blockchain Trends](#)
- Shiller, R. J. (1993). [Measuring Asset Values for Cash Settlement in Derivative Markets: Hedonic Repeated Measures indices and Perpetual Futures](#)
- StatsPanda. (2026). [Credit Card Transactions Worldwide](#)
- Tradeweb. (2026). [DTCC Turns Tokenization into Reality: U.S. Trades Successfully Processed Using DTC-Tokenized Assets](#)

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