



Corporate Bank

Digital Money – a perspective on stablecoins, tokenised deposits, and CBDCs

Deutsche Bank



Digital Money – a perspective on stablecoins, tokenised deposits, and CBDCs

What it means for institutions and corporates

As money becomes more digital, programmable and always on 24/7, institutions and corporates need a clearer understanding of emerging developments – and their practical implications. This paper explores the digital money landscape – spanning stablecoins, tokenised deposits and central bank digital currencies – the regulatory and market forces shaping it, and how these changes are impacting financial institutions, corporate treasury and custody models.

Deutsche Bank contributors

Manuel Klein, Head of Market Management Payments and Digital Currencies

Sabih Behzad, Head of Digital Assets & Currencies Transformation

Ciaran Byrne, Global Head of Product and Client Solutions, Institutional Cash Management

Marvin Ulbrich, Emerging Rails | Global Client Solutions, Institutional Cash & Trade Management

Clarissa Dann, Editorial Director, Marketing

With thanks to Marion Laboure and Mallika Sachdeva from Deutsche Bank Research for additional research and data

Published May 2026

Contents

Foreword	4
1 Scope of current money landscape	5
1.1 Summary of physical and digital money landscape	5
1.2 Comparison between different types of digital money	7
2 Stablecoins	8
2.1 What are stablecoins?	8
2.2 Origins and USD dominance	8
2.3 Regulatory clarity	9
2.3.1 United States	11
2.3.2 European Union	11
2.3.3 Asia	12
2.4 Stablecoins as a payments enabler	13
2.4.1 Market activity and emerging payment use cases	13
2.4.2 Structural frictions to scaling adoption	16
3 Tokenised deposits	17
3.1 Bank centric tokenised deposit platforms	17
3.2 Multi bank tokenised deposit platforms	17
3.3 Tokenised deposits issued on industry / public blockchains	18
3.4 Use cases, capabilities and practical constraints	18
4 Central bank digital currencies	20
4.1 Retail CBDCs: ambition vs adoption	21
4.2 Wholesale CBDCs: from concept to implementation	22
5 Digital money use cases for financial institutions, corporates, and custodians	24
5.1 Digital money and corporates	26
5.2 Digital money and financial institutions	27
5.3 Digital money and custodians	28

Foreword

Technology and how it moves money is cyclical. Innovation disrupts, industry adapts, and some of what was once cutting-edge becomes mainstream.

From a corporate banking perspective, we are now part of a financial system that continues its journey towards an “always on” 24/7 market infrastructure. This is where legacy systems comprising batch processing and cut-off times are navigated alongside the agility and reach of digital money solutions.

As technologies have fast-forwarded the development of digital payment and asset management products and services, it is our duty as a globally systemic bank to be ready for what clients will ask us in a digital money, digital wallet-structured landscape.

This paper provides an essential briefing on the three main types of digital money that are already seeing real-world use cases.

Stablecoins are developing as a bridge between blockchain-based ecosystems and traditional finance, while tokenised deposits are extending the existing banking model into programmable environments, preserving the role of commercial bank money while enabling new functionality. In parallel, central banks are exploring retail and wholesale central bank digital currencies (CBDCs), with a growing focus on their role in supporting tokenised markets and improving cross-border settlement.

Supportive regulatory frameworks are taking shape across major jurisdictions, and financial institutions and corporates are working together with regulators and market infrastructure providers to build the foundations for more continuous, data-rich and interoperable systems. For example, we are contributing to this through initiatives such as Project Agorá, as well as through our partnership with Partior, helping to drive next-generation settlement models and cross-border infrastructure.

Alongside our active involvement, we believe banks will ultimately play an important role in abstracting complexity from clients – ensuring that, depending on the nature of each transaction, the most appropriate form of digital money is used, whether a stablecoin, a tokenised deposit or a CBDC.

With all of this in mind, I am pleased to introduce this white paper, *Digital Money – a perspective on stablecoins, tokenised deposits, and CBDCs*, which explains the structure of each type, sets out where momentum is building, and concludes with what these changes mean in practice for corporates, financial institutions and asset custodians



Gerald Podobnik,
Co-Head
Corporate Bank,
Deutsche Bank

1

Scope of current money landscape

As multiple digital money models emerge, this section outlines the current money landscape, defining the key forms of digital money and how each relates to existing public and private monetary systems.

1.1 Summary of physical and digital money landscape

Money performs three core functions: it acts as a unit of account, a medium of exchange and a store of value. As technology evolves, so too does the form that money takes – from coins and banknotes to bank deposits, electronic money and now digital, programmable formats.

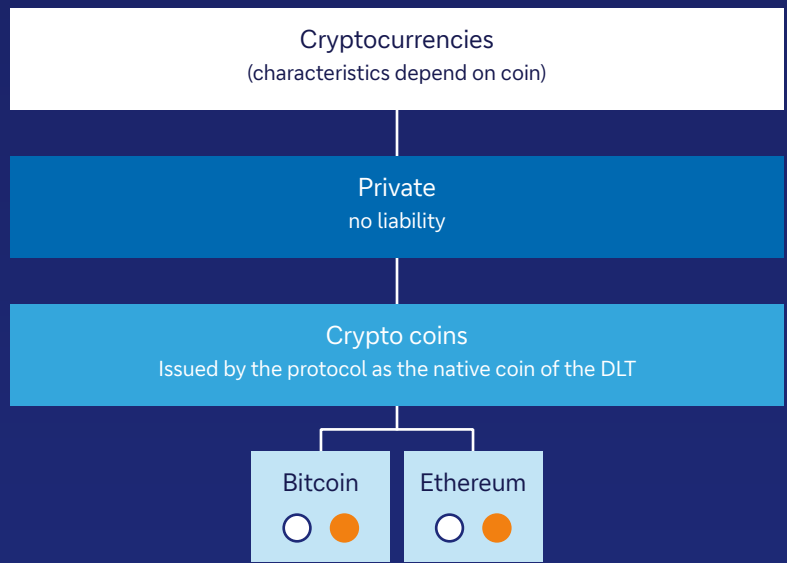
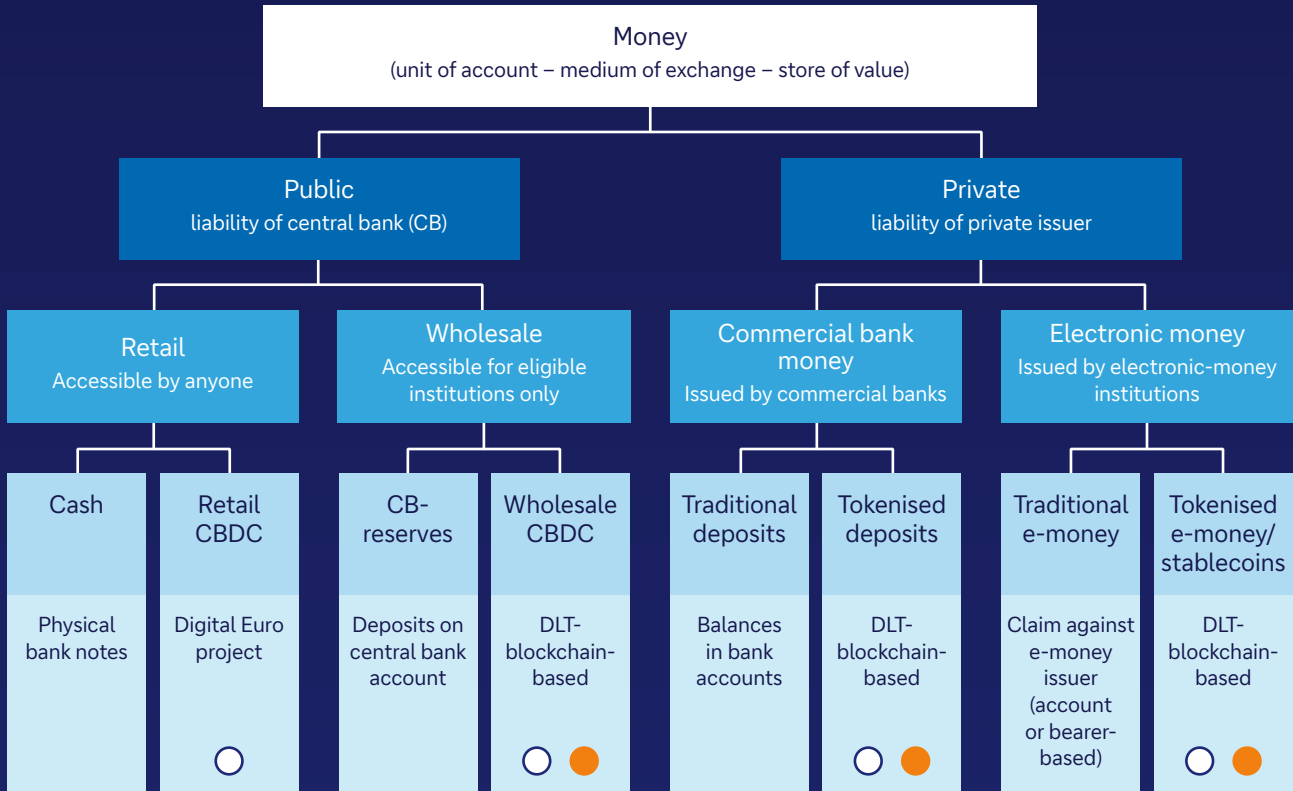
This development is occurring along two broad dimensions: the development of digital public money, most notably through the exploration of retail and wholesale CBDCs; and the development of digital private money, including tokenised deposits – digital representations of commercial bank money – and new forms of electronic money, such as stablecoins.

Cryptocurrencies are often discussed alongside digital money but come under a different category. As decentralised assets without a regulated issuer or backing by fiat currency, their value is highly volatile and driven largely by speculation – making them impractical for pricing goods or settling institutional payments.

In practice, therefore, cryptocurrencies function primarily as speculative assets, whereas digital money – whether public or private – remains anchored to fiat currency and designed for trusted, transactional use.



Figure 1: The money landscape



Source: Deutsche Bank

1.2 Comparison between different types of digital money

The emerging digital money sector includes several distinct models, each designed for different issuers, users, approaches and use cases. Figure 2 provides a high-level comparison of the four models.

Figure 2: The digital money landscape compared

Digital money type	Definitions	Issuer / liability	Typical rail	Primary near-term utility
Fiat-backed stablecoin (regulated)	Digital representation of fiat currency issued on public blockchains, backed by reserves and designed to maintain a stable value	Non-bank or bank issuer; claim on underlying reserves	Public blockchains	Crypto market liquidity and trading; expanding into real-world use cases including USD access, remittances, B2C payouts, and early B2B payments, enabling always-on, 24/7 settlement beyond bank cut-off times
Tokenised deposits	On-chain representation of commercial bank deposits that retain existing legal, regulatory and prudential characteristics	Commercial bank; claim on the bank	Private DLT networks, consortium ledgers (e.g. Partior, Swift Ledger, Agorá), with emerging pilots on public chains	24/7 settlement, programmability & automation; intra-bank settlement and modernisation of cross-border correspondent banking
Wholesale CBDC	Tokenised central bank money designed for use between financial institutions, enabling composable and programmable transactions	Central bank	Central bank-operated DLT or integrated with RTGS systems (e.g. Project Pontes)	On-chain settlement asset; delivery-versus-payment (DvP) for tokenised assets and tokenised deposits
Retail CBDC (digital euro)	Digital form of sovereign currency issued by a central bank for use by the general public, complementing physical cash in a digital economy	Central bank (distributed via PSPs)	Retail payment infrastructure (wallet-based, online/offline; not necessarily blockchain)	Pan-regional payment acceptance; access to central bank money for citizens; support for financial inclusion and resilience

Source: Deutsche Bank

2

Stablecoins

Stablecoins are emerging as one of the most advanced forms of digital private money, moving from their crypto-market origins to support a wider range of use cases. This section explores how stablecoins are structured, the market dynamics underpinning US dollar dominance, and the regulatory frameworks shaping their development, before assessing their emerging role in payments and the obstacles to achieving broader adoption.

2.1 What are stablecoins?

A stablecoin is a blockchain-based token issued by banks, corporates or fintechs, typically backed one-for-one by a fiat currency – most often the US dollar – with reserves held in cash and high-quality liquid assets (HQLAs), such as short-term government debt. They are designed to maintain price stability by holding collateral reserves to support their value, with transparency achieved through regular disclosure of those reserves.

The models used to achieve this stability can be grouped into four broad categories – fiat-backed, asset-backed, crypto-backed and algorithmic. This section focuses on fiat-backed stablecoins, examining their evolution beyond crypto markets into a wider set of use cases, supported by increasing regulatory clarity across jurisdictions.

2.2 Origins and USD dominance

Stablecoins have grown rapidly in scale, increasing from a market capitalisation of around US\$50bn in 2021 to over US\$300bn by April 2026.¹ While interest in broader applications is increasing, their primary function remains within the crypto ecosystem.

This reflects their origin; stablecoins were developed to provide a stable unit of account in highly volatile crypto markets, enabling traders to move between positions, manage liquidity and rebalance portfolios on a continuous, 24/7 basis. Today, this remains their dominant use case, with an estimated 95-99% of transaction volumes supporting liquidity provision on crypto exchanges, collateral management and decentralised finance (DeFi) activity.²

The crypto-native foundation also explains a defining feature of the market: its overwhelming US dollar denomination. Stablecoin usage is closely tied to the structure of crypto markets, which are themselves highly dollarised, with liquidity concentrated in US dollar-denominated instruments. Two stablecoins – Tether (USDT) and USD Coin (USDC) – dominate trading pairs and settlement activity.

As noted in *Future Payments: Bitcoin: The end of 'The Tinkerbelle Effect'*, a February 2026 paper published by Deutsche Bank Research, “the popularity of dollar-backed stablecoins stems from their utility as a medium of exchange and their aim to maintain a ‘stable’ value by pegging their price to the ‘safe haven’ properties of a portfolio of cash, bank deposits, and short-term securities (mainly US Treasuries), issuing tokens 1:1 against these assets.”

As a result, USD-pegged stablecoins account for approximately 99% of total market capitalisation, while non-USD stablecoins remain marginal (see Figure 3).

One additional reason for this limited growth beyond the US dollar – and even other major reserve currencies – is the difficulty of replicating the US “short-reserve” model, as outlined in the GENIUS Act (see [Section 2.3.1](#)). In many jurisdictions, particularly across emerging markets in Asia, local government bill markets are shallower, smaller or less consistently issued. As a result, design choices – including eligible reserve assets, redemption mechanics, the role of market makers and the availability of intraday liquidity backstops – become central factors in determining whether non-USD stablecoins can scale safely and cost-effectively.

Figure 3: Stablecoin market capitalisation by currency



Source: Deutsche Bank

The implications of US dollar dominance extend beyond market dynamics into the broader macro-financial system, reinforcing the dollar’s role as the world’s leading reserve and transaction currency. Requirements for stablecoin issuers to hold high-quality liquid assets are also driving sustained global demand for dollar-denominated instruments – particularly US Treasuries – supporting the US’s ability to finance itself efficiently and contributing to relatively low borrowing costs.

To put this into perspective, USD-backed stablecoins such as Tether are now among the largest holders of US Treasuries, with exposures comparable to those of countries such as Brazil, Saudi Arabia and South Korea.

2.3 Regulatory clarity

Regulation is proving to be a key determinant in the evolution – and growth – of stablecoins globally. Across jurisdictions, frameworks are beginning to define how reserves are managed, disclosed and redeemed, shaping risk, liquidity and market integration, as well as how stablecoins fit within existing financial structures (see Figure 4). This, in turn, is setting the foundation for stablecoins to further expand into broader financial activity, including cross-border payments, liquidity management and institutional settlement.

Figure 4: Digital asset regulatory momentum

Significant progress was made on regulatory digital-asset frameworks in 2025, with even greater momentum expected through 2026

United Kingdom



New UK government refreshed its commitment to becoming a crypto-asset hub in Europe – ongoing consultations to finalise the regulatory framework for crypto-assets and stablecoins.

European Union



European supervisory authorities continue to establish supervisory practices for crypto-asset activities under MiCAR which is fully applicable since Dec 2024.

United States



GENIUS Act signed into law in July 2025 reflecting the government's focus on USD-stablecoins – implementation is ongoing.

Market structure legislation (CLARIFY Act) in the making to clarify rules of different agencies and prohibit USD-CBDC work.

Singapore



MAS consultation on digital tokens, prudential treatment of crypto asset exposures, reserve requirements and other rules for stablecoin issuers.

Hong Kong SAR



Launch of ASPIRE roadmap with multiple initiatives for crypto-assets & HK passes stablecoin bill establishing licensing-regime.

Source: Deutsche Bank

2.3.1 United States

In July 2025, the United States (US) enacted the Guiding and Establishing National Innovation for US Stablecoins (GENIUS) Act.³ While signed into law, elements of the framework remain subject to implementation by relevant regulatory agencies, with further rulemaking expected through 2026 and enforcement anticipated from 2027.

The GENIUS Act establishes a comprehensive regulatory framework for stablecoins, including:

- A specific focus on stablecoins, rather than crypto assets more broadly.
- The introduction of a new category of “permitted stablecoin issuers”, allowing both banks and non-bank entities to issue stablecoins subject to bank-like federal or state oversight.
- Strict 1:1 reserve backing requirements, limited to US cash, short-dated US Treasury bills (≤93 days), repos and reverse repos, or money market funds holding these assets.
- Restrictions on yield generation by issuers, reinforcing stablecoins’ treatment as payment instruments rather than investment products.
- Full alignment with anti-money laundering (AML), know-your customer (KYC) and Bank Secrecy Act (BSA) requirements.
- Application to foreign issuers operating within the US market, such as Tether.

US authorities have signaled the potential scale of this market. For example, Treasury officials forecast that regulated stablecoins will buttress the dollar’s status as the global reserve currency, expand access to the dollar economy for billions across the globe, and lead to a surge in demand for US Treasuries, which back stablecoins – creating a multitrillion-dollar industry.⁴

Together, regulatory clarity and institutional endorsement are driving increased investment and accelerating the development of stablecoin use cases, particularly in payments. For example, in his November 2025 speech Federal Reserve Governor Stephen Miran suggested that clearer regulatory pathways for issuers could expand the reach of stablecoins and reinforce their role as a core component of the payments system.⁵

2.3.2 European Union

In contrast to the more targeted, stablecoin-focused approach emerging in the US, the EU’s Markets in Crypto-Assets Regulation (MiCA) provides a comprehensive crypto-asset rulebook designed to safeguard monetary sovereignty and financial stability and:⁶

- Covers the full crypto-asset ecosystem, not only stablecoins
- Explicitly addresses risks to the euro and monetary transmission
- Imposes usage caps on significant non-euro stablecoins (e.g. €200m in daily transactions)
- Requires reserves to be held within the EU, with EU-regulated custodians
- Mandates that issuers establish and maintain a licensed EU presence

MiCA was fully implemented at the end of June 2023, establishing a robust and harmonised regulatory framework for stablecoin issuance across the EU. It enables licensed electronic money institutions (EMIs) to issue tokenised money within a clear, rules-based environment, building on existing e-money regulation while introducing additional requirements for issuing euro-denominated and other fiat-linked tokens on blockchain infrastructure.

Since the implementation of the regulation, a growing number of EMIs have brought authorised electronic money tokens (EMTs) to market. Notable developments include AllUnity, a collaboration between DWS Group, Flow Traders and Galaxy Digital, which secured an e-money licence from Germany’s BaFin in July 2025 and subsequently launched its euro stablecoin (EURAU) across public blockchains.⁷

The global fintech Circle was also among the first issuers to receive MiCA authorisation, covering both its euro-denominated stablecoin (EURC) and USDC within the European regulatory perimeter.⁸ In parallel, in September 2025 a consortium of nine European banks launched a jointly issued stablecoin under the Dutch e-money regime, although this initiative has yet to receive formal regulatory approval.⁹

2.3.3 Asia

Across Asia, governments and financial authorities across the region are actively shaping how stablecoins can develop within existing financial systems, balancing innovation with financial stability and monetary policy considerations (see Figure 5).

Figure 5: Summary of Asia regulatory frameworks for stablecoins

Hong Kong SAR	Hong Kong’s Stablecoins Ordinance, which came into effect on 1 August 2025, ¹⁰ establishes a licensing regime for issuers of fiat-referenced stablecoins, alongside Anti-Money Laundering and Counter-Financing of Terrorism (AML/CFT) requirements. No licences have been granted to date.
Singapore	Singapore has completed the Stablecoin Comprehensive System (SCS) framework, which applies to stablecoins pegged to the Singapore Dollar and G10 currencies; notably, this framework permits paying yield on stablecoins – a practice generally restricted under most other national regimes. ¹¹
Japan	Japan’s amended Payment Services Act maintains limitations on stablecoin issuance, allowing only licensed banks, trusts, and money transfer entities to participate, with further regulatory updates anticipated through 2026. ¹²
Thailand	The Thai Securities and Exchange Commission expanded the list of cryptocurrencies eligible for use in initial coin offerings and as exchange base pairs to include stablecoins such as USDC and USDT, effective 16 March 2025. ¹³ The country has also launched the multi-agency TouristDigiPay sandbox, allowing foreign visitors to convert digital assets – including stablecoins – into Thai baht for spending through e-money providers during an 18-month test window.

Source: Deutsche Bank



2.4 Stablecoins as a payments enabler

Driven by the implementation of comprehensive regulatory frameworks for stablecoin issuance and transfers across key global regions, stablecoins have generated significant interest from the payments industry.

2.4.1 Market activity and emerging payment use cases

In 2025, overall stablecoin transaction volume was estimated at US\$62trn, according to the BCG white paper *Stablecoin payments – the truth behind the numbers* published in January 2026.¹⁴ However, once non-economic activity, including bots and internal transactions, is removed, only around US\$4.2trn is estimated to represent actual transfers (see Figure 6). Of this amount, roughly US\$350bn to US\$550bn corresponds to real-economy payments, representing less than 1% (see Figure 7).¹⁵

While real-economy payments still account for only a small share of activity, they are growing rapidly and are concentrated around use cases where traditional payment rails can improve efficiency. Estimated real-economy payments grew by approximately 60% year-on-year in 2025, with the strongest growth in business-to-business (B2B) transactions.¹⁶

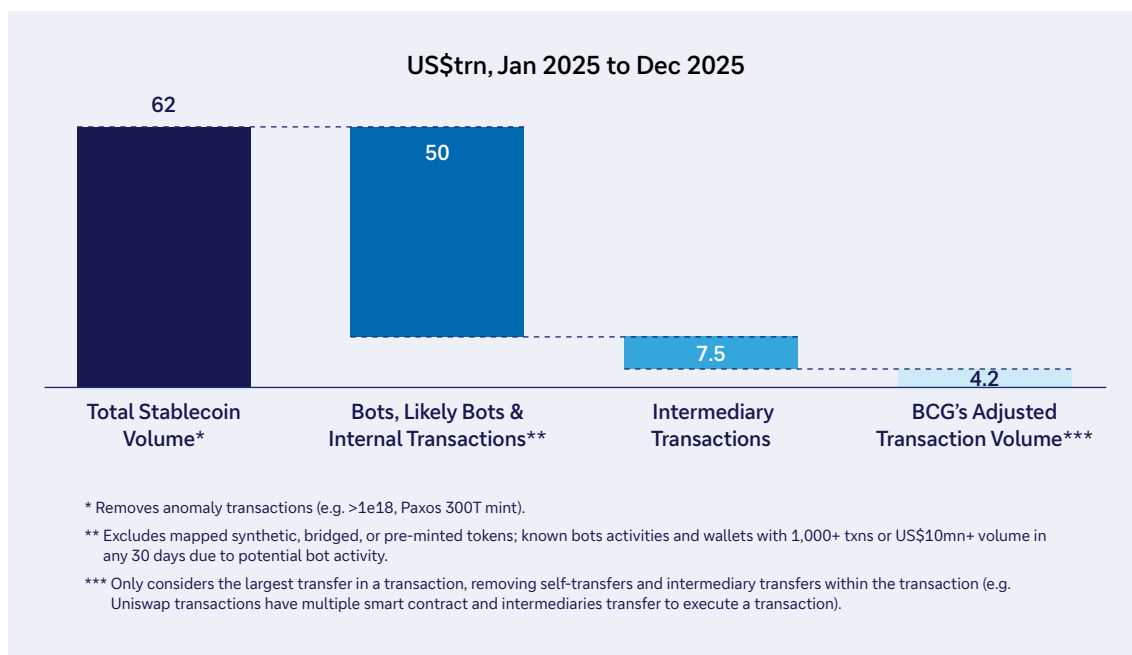
Recent M&A activity highlights this increasing convergence with mainstream finance. For example, Mastercard agreed in March 2026 to acquire stablecoin infrastructure provider BVNK,¹⁷ while Stripe has completed its acquisition of Bridge Network, reinforcing the growing strategic importance of stablecoin capabilities within global payments ecosystems.¹⁸

This is backed by the emergence of several payment and enterprise use cases. Stablecoins are increasingly used as a convenient means of accessing USD as a store of value, particularly in markets experiencing high inflation or unstable exchange rates. In the payments sector, service providers – including remittance companies – use stablecoins to enable faster and more cost-effective cross-border transfers while allowing recipients to retain digital USD balances. Stablecoins are also emerging as a lower-cost alternative for business-to-consumer (B2C) payouts, benefiting gig-economy workers and digital platform contributors who may prefer USD exposure over local currencies. Business-to-business (B2B) payments represent another emerging area of growth, particularly for cross-border transfers where traditional correspondent banking processes remain dominant, and where such processes may lack speed and transparency in certain corridors today. In addition to the above, stablecoins, as distributed ledger technology (DLT)-based instruments, inherently bring the potential for enhanced programmability, opening up possibilities for future innovative use cases.

Beyond payments, stablecoins have the potential to be adopted as a payment and settlement instrument within tokenised capital markets. With the increasing adoption of DLT and digital assets across capital markets globally, stablecoins can serve as a settlement asset for certain on-chain settlement use cases, such as with Delivery-versus-Payment (DvP) settlement of securities against cash. Market players such as BlackRock and Circle are realising such use cases today; in April 2024, both players announced a partnership allowing holders of BlackRock’s USD Institutional Digital Liquidity Fund (BUIDL, a tokenised money market fund), to transfer their shares to Circle in exchange for Circle’s USDC stablecoin.¹⁹

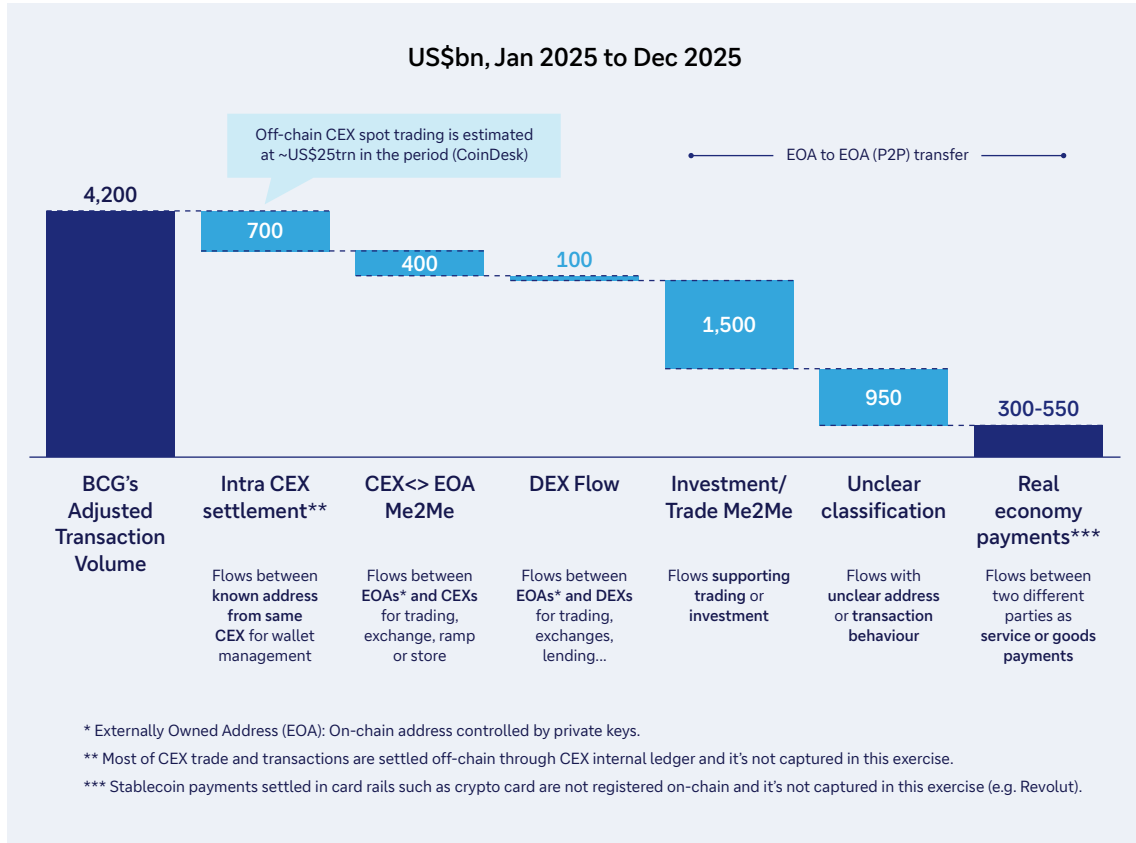
As regulatory frameworks continue to mature, the next phase of development is likely to centre on more advanced payment use cases. These include cross-border, cross-chain payment-versus-payment (PvP) foreign-exchange settlement, delivery-versus-payment (DvP) models linking tokenised assets to domestic payment systems, and seamless interoperability between different forms of digital money in practical commercial settings.

Figure 6: Stablecoin on chain transaction volumes are dominated by bots and internal transactions



Source: BCG Stablecoin Payments 2026²⁰

Figure 7: Investment and trade dominate on-chain adjusted volumes



Source: BCG Stablecoin Payments 2026²¹





2.4.2 Structural frictions to scaling adoption

Despite their progress to date, several structural frictions continue to limit the scalability of stablecoins as a payments instrument, particularly in B2B contexts. Key challenges include:

- **Interoperability and fungibility.** The proliferation of stablecoins across multiple blockchains and issuers creates fragmentation. Stablecoins issued by different entities are only conditionally fungible: even where pegged to the same fiat currency, differences in reserve composition, governance and market perception can lead to price divergence. This limits seamless transfer and acceptance across networks and use cases.
- **Regulatory consistency and clarity.** Stablecoins sit outside traditional categories of cash, deposits or securities and are increasingly governed under dedicated regulatory regimes. While frameworks are emerging, global alignment remains limited, creating the risk of fragmentation and regulatory arbitrage. These factors will ultimately shape where and how stablecoins can be used at scale.
- **Institutional-grade infrastructure.** Custody solutions, as well as scalable and compliant on- and off-ramping capabilities, are still being developed, although banks are increasingly investing in these areas.
- **Compliance standardisation.** Stablecoin payment providers must meet stringent AML/CFT requirements, which are not yet applied consistently across jurisdictions.
- **Integration with existing systems.** Treasury and finance teams require stablecoin transactions to integrate into existing ERP and treasury management systems, including reconciliation and reporting workflows.
- **Messaging and standards.** Unlike traditional payments, there is no widely adopted, industry-standard messaging framework comparable to ISO 20022.²²

3

Tokenised deposits

Tokenised deposits have emerged as a promising model for enabling programmable bank money across payments, treasury operations and wholesale settlement. As banks explore how to extend deposit liabilities onto distributed ledger infrastructure, a range of deployment models are beginning to take shape, from closed, bank operated platforms to shared industry networks and, at the frontier, on public blockchains. Each model trades off control, interoperability, and market reach, and all three are expected to coexist.

This section examines the main infrastructure approaches emerging across the industry, their capabilities and practical constraints, and the use cases they are beginning to support.

3.1 Bank centric tokenised deposit platforms

Currently, tokenised deposit platforms are most commonly used to transfer liquidity between accounts held across different branches within the same financial institution. In these setups, banks operate proprietary blockchain networks that enable 24/7 settlement across branches by representing deposits from corporate clients or other banks as tokens on an internal ledger, allowing transfers beyond conventional cut-off times. By leveraging tokenised deposits, banks can also introduce programmability and additional rule sets, supporting more flexible cash pooling structures and automated, rules-based cash sweeping.

While there are clear benefits to these platforms, challenges remain. Interoperability and fungibility issues between tokenised deposits issued by different banks remain unresolved, limiting seamless transfer and acceptance across networks. Separately, a critical – and often underestimated – requirement is the integration of tokenised deposit systems with existing, non-blockchain payment infrastructure. This includes ensuring consistent reconciliation, risk controls and regulatory reporting across both on-chain and traditional payment flows.

In addition, while adoption is increasing and transaction volumes are growing, many of the core benefits could also be achieved through non-blockchain infrastructure. The real value they could add will, therefore, ultimately depend on how well these systems integrate with existing banking and processing systems and clients' cash management and payments use cases and workflows.

3.2 Multi bank tokenised deposit platforms

A second model involves industry collaborations that provide shared ledger infrastructure across multiple institutions. These platforms aim to enable coordinated movement of tokenised deposits across banks while preserving the governance and controls expected in regulated financial networks:

- Partior operates live for real time cross border settlement of tokenised deposits, adding pre validation and atomic settlement to reduce breaks and investigations.²³
- Project Agorá (BIS/IIF with seven central banks and 40+ banks and private enterprises) is designing a unified ledger where tokenised deposits interoperate with wholesale CBDC for policy aware, atomic cross border settlement – modernising correspondent banking while preserving the two tier system.²⁴

– Swift’s blockchain-based, shared ledger initiative, announced September 2025, aims to add a DLT based shared ledger to its infrastructure so regulated institutions can coordinate movements of tokenised value at scale.²⁵ In March 2026, Swift completed the design phase of the initiative and is now actively building the first iteration.²⁶

In the future, multi bank tokenised deposit platforms could enable coordinated 24/7 cross border movement of tokenised deposits between banks with near instant interbank settlement and added programmability to enable orchestration of more complex financial products (e.g., intraday FX swap features). From a corporate perspective, they could also support more automated, rules based corporate cash management (e.g., cash pooling/sweeping) on shared ledger infrastructure across multiple institutions. These promises depend on multi-bank settlement assets, clear rulebooks, governance, and deep bank integration – across messaging, controls, booking and liquidity – to scale safely. While certainly promising, the development and implementation of these networks are complex and necessitate significant industry collaboration, indicating that large-scale commercial deployment will take time.

3.3 Tokenised deposits issued on industry / public blockchains

To date, tokenised deposit implementations have relied on private, permissioned blockchains accessible only to issuing banks or authorised institutions. As public blockchains gradually gain recognition as legitimate settlement infrastructure within the regulated financial sector, several banks have begun experimenting in this space by issuing deposit liabilities on public blockchains under whitelisted, KYC-bound access. This enables clients to use their bank deposits on these platforms without first converting funds into stablecoins, which have traditionally served as the primary medium of exchange in these ecosystems. The objective is to allow bank money to move to the environments where digital economic activity increasingly takes place, while maintaining the safeguards of regulated financial networks.

For now, transferability typically remains limited to the issuing bank’s own client base. Broader circulation across institutions raises as yet unresolved legal and supervisory questions around the transferability of deposit liabilities beyond the original depositor relationship. If these issues are addressed, so-called deposit tokens could eventually move between clients of different regulated institutions – other than the issuing bank – provided robust KYC requirements are met.

Policy-gated corridors and emerging standards – including pilots under initiatives such as the Monetary Authority of Singapore’s (MAS) Project Guardian – are exploring how such models could operate safely.²⁷ As regulatory guardrails mature, these tokens could be bridged to shared ledgers and RTGS or wholesale-CBDC environments to achieve interbank finality, combining the reach of open blockchain networks with the settlement assurance of regulated financial infrastructure.

At present, however, the issuance of tokenised deposits that can move beyond an issuing bank’s client base remains experimental but provides a useful indication of how this model could evolve.

3.4 Use cases, capabilities and practical constraints

As a form of private digital money, tokenised deposits are often viewed as a payment instrument competitive against stablecoins. Fundamentally, as a payment instrument issued on a blockchain (whether private or public), tokenised deposits have the potential and ability to realise many of the purported efficiency gains that stablecoins can provide for payments, namely in terms of driving increased speed, transparency, and potentially lower costs.

Aside from the potential synergistic benefits that tokenised deposits may provide for clients of said institutions (against other existing services), holders are able to earn yield on tokenised deposits; in many key jurisdictions such as the US and EU, regulators have clarified that tokenised deposits are to be treated in the same manner as conventional deposits. This contrasts against stablecoins, where regulations such as MiCAR in the EU or the GENIUS and CLARITY Act in the US have prohibited the earning of yield by stablecoin holders. The ability to earn yield and seamlessly transact against other products and services offered by the issuing institution may be a more compelling proposition for clients that are already deeply integrated and entrenched in a bank's ecosystem.

Similarly within the domain of capital markets, the case for the use of tokenised deposits as a settlement instrument draws merit from its issuer; where commercial bank money – next to central bank money – has a well-established track record of being used in capital markets for settlements of securities and margins from a legal, regulatory, and market acceptance perspective. The tokenisation of commercial bank money therefore has the potential to play a similar role in the new era of tokenised capital markets, offering the same level of trust to market participants while opening doors for new innovative settlement models and use cases.

As evidenced above, the benefits of tokenised deposits are well understood and widely reported, ranging from always-on operations with atomic settlement to enhanced programmability and automation of payment and treasury processes. However, while these capabilities introduce new possibilities across payments, treasury management and wholesale settlement, their adoption also raises practical considerations around interoperability and integration with existing banking systems.

A central challenge lies in interoperability and network reach. Moving value across private, permissioned ledgers relies on standardised rulebooks, integration platforms and orchestration layers into core-banking systems that are only beginning to mature. Herein lies a key distinction between tokenised deposits and stablecoins: while tokenised deposits today can typically only be held by clients of the issuing bank, stablecoins can be held practically by anyone that has a wallet that can hold the stablecoins, including users who may not have a direct relationship with the stablecoin issuer. Until there is greater progress around the issuance and adoption of universal public tokenised deposits, or 'deposit tokens' (see [Section 3.3](#)), tokenised deposits are likely to remain primarily within individual bank or closed consortium environments rather than forming a fully interconnected network with broad reach.

Legal and regulatory clarity is also still developing, particularly where tokenised deposits intersect with public blockchain infrastructure. Transferability beyond the issuing bank's client base requires explicit legal treatment and appropriate disclosures. In the European Union, for example, deposits remain outside the regulatory perimeter of MiCAR and hence for e-money tokens, but institutions must clearly provide evidence of the deposit-law basis of these instruments and ensure transparent client communication.

Closely related is the need to bridge between distributed-ledger rails and existing payment infrastructures. In practice, banks must be able to coordinate real-time on-chain updates with the settlement finality of RTGS or wholesale CBDC systems – at best directly combined on a new infrastructure such as Partior, Swift Ledger or Agorá and the messaging standards used in conventional payment flows, for example ISO 20022. Doing so allows clients to benefit from programmable settlement and extended operating hours without losing reach into today's global payment networks.

4

Central bank digital currencies

Central bank digital currencies (CBDCs) are digital forms of central bank-issued money that can be designed either for use by the general public (retail CBDC) or for use between financial institutions (wholesale CBDC).

Retail CBDCs are designed for use by retail users as a digital complement to cash, providing access to central bank money in electronic form for everyday payments. While various jurisdictions have explored retail CBDCs, adoption has so far been limited. China remains the most advanced large-scale example, while in developed markets Europe is among the few regions actively progressing a potential retail CBDC – the digital euro.

Wholesale CBDCs are digital forms of central bank money designed for use between financial institutions, enabling the settlement of interbank payments and securities transactions. They build on existing central bank reserves held in Real-Time Gross Settlement (RTGS) systems – such as T2 in Europe or Fedwire in the United States – which already facilitate electronic settlement in central bank money. Through tokenisation and distributed ledger technology, wholesale CBDCs extend these mechanisms onto programmable infrastructures, offering the potential to support more efficient capital markets and DLT-based correspondent banking.

Decisions about whether to issue a CBDC, how it should be designed, and the policies governing its use ultimately rest with individual central banks within their respective jurisdictions. At the international level, the Bank for International Settlements (BIS) plays an important convening and research role, facilitating discussion and coordination among central banks exploring these developments.

This section explores the diverging trajectories of retail and wholesale CBDCs, examining the gap between ambition and adoption in consumer-facing models, and the growing momentum behind wholesale initiatives.



4.1 Retail CBDCs: ambition vs adoption

Retail CBDCs have been positioned as a digital complement to cash, offering the public access to central bank money in an increasingly digital economy.

As the BIS explained in its July 2023 report *Lessons learnt on CBDCs*, submitted to the G20 Finance Ministers and Central Bank Governors: “Central bank money has unique advantages – safety, finality, liquidity and integrity. As economies go digital, they should continue to benefit from these advantages. Given that money sits at the heart of the financial system, it must continue to be issued and controlled by trusted and accountable institutions that have public policy – not profit – objectives”.²⁸

Progress on retail CBDCs has nonetheless been uneven. In the US, political sentiment has moved away from adopting a retail CBDC model. In July 2025 the House of Representatives passed the Anti-CBDC Surveillance State Act, reinforcing an executive order that prohibits the Federal Reserve from issuing a CBDC.²⁹ Consequently, US policy is increasingly focused on supporting regulated stablecoins and private payment systems, which are viewed as more adaptable platforms for innovation.

In the United Kingdom, as of April 2026 a final decision on whether to issue a retail CBDC has yet to be reached. The Bank of England (BoE) and HM Treasury are continuing with the design phase, prioritising a public–private partnership approach and robust legal safeguards for privacy if the project advances. This approach also reflects growing expectations that the private sector may deliver many of the same innovations through tokenised deposits and other digital payment solutions.³⁰

China continues to offer the most advanced large-scale example, with the e-CNY ecosystem still developing steadily. Expansion has been supported by an established network of hardware wallets, enhanced offline payment capabilities, and ongoing cross-border pilot initiatives. By September 2025, cumulative transaction volumes in pilot cities reportedly reached RMB14trn (approximately US\$2trn). Nonetheless, widespread mass adoption has yet to materialise, largely due to the entrenched use of private payment platforms such as Alipay and WeChat Pay.³¹

In Europe, the European Central Bank (ECB) is advancing its initiative to introduce a digital euro, intended to complement physical cash with a digital form of central bank money for end users.³² The digital euro is expected to be accessible via wallets managed by payment service providers (PSPs) and the ECB itself, supporting both online and offline, non-interest-bearing balances. It is designed to facilitate a broad range of payment activities, including point-of-sale, e-commerce and peer-to-peer transactions.

Following its investigation phase from 2021 to 2023, the ECB entered a preparatory phase spanning the period November 2023 to October 2025. This phase included the development of a rulebook, the selection of technology providers, and the launch of an innovation platform involving over 70 market participants. In October 2025, it entered a second preparation phase that will lead into a pilot and realization phase: Subject to legislative approval, pilot testing could begin in H2 2027, with a potential launch around 2029.³³

Under current proposals, the digital euro would carry legal tender status, requiring acceptance by merchants across the eurozone. To safeguard financial stability and limit potential deposit outflows from banks, holding limits are expected to be introduced for retail users. Corporate entities would not be able to hold digital euros directly; instead, payments would be settled directly into bank deposits ('waterfall mechanism'). The ECB is also exploring an automatic top-up mechanism ('reverse waterfall'), enabling seamless payments from traditional bank accounts without requiring pre-funding of wallets.³⁴

These design choices suggest that the digital euro may function primarily as a mechanism for facilitating account-to-account payments as no pre-funding of digital Euros by citizens is required and the money received by merchants will be credited directly to bank accounts, narrowing the distinction with existing and developing instant payment-based solutions such as Wero,³⁵ developed by the European Payments Initiative (EPI), or domestic schemes such as Bizum in Spain.³⁶ This has reinforced calls from the banking sector to ensure that ongoing private-sector innovation is reflected in the design of any retail CBDC.

Taken together, these developments reflect a divergence between ambition and adoption, with progress shaped as much by political, commercial and user considerations as by technological readiness.

4.2 Wholesale CBDCs: from concept to implementation

In contrast to retail models, wholesale CBDCs are gaining traction as central banks focus on modernising financial market infrastructure and enhancing the efficiency of interbank settlement.

Central banks already provide digital public money within the financial system through balances held in Real-Time Gross Settlement (RTGS) systems, such as T2 in Europe or Fedwire in the United States. These systems have long enabled financial institutions to settle payments using central bank money in electronic form.

With the advent of distributed ledger technology (DLT) and tokenisation, central banks are now exploring how these existing forms of money could evolve into tokenised wholesale central bank money. These developments are closely linked to broader efforts to support tokenised capital markets and modernise correspondent banking.

For example, Project Agorá – launched by the BIS in April 2024 – exemplifies this approach, bringing together seven central banks and more than 40 major financial institutions to collaboratively develop a shared-ledger infrastructure for settling tokenised deposits with tokenised central bank money, with the aim of streamlining correspondent banking and enhancing settlement efficiency.³⁷



Domestic developments are also progressing. In the United Kingdom, the BoE is evaluating several models for new wholesale settlement mechanisms as part of its RTGS renewal programme,³⁸ which is designed to improve interoperability with DLT-based systems. The BoE also plans to test a wholesale CBDC token across multiple use cases, including delivery-versus-payment (DvP) and payment-versus-payment (PvP). In parallel, Finality – a regulated DLT-based payment system offering a settlement asset backed by central bank money – is operational and plans to expand into US dollar and euro markets.³⁹

In Asia, Hong Kong SAR and Singapore are actively advancing wholesale CBDC initiatives and cross-border experiments. Hong Kong is focused on developing settlement infrastructure for tokenised deposits, while Singapore is conducting broader DLT-based settlement trials for capital markets. Singapore has also established partnerships with multiple central banks, including the Bundesbank, BoE and Bank of Thailand, to explore interoperability between domestic and cross-border digital settlement systems.⁴⁰

In Europe, the Eurosystem is pursuing a dual-track approach to central bank money settlement using distributed ledger technology. The first track, Pontes, is expected to enter a pilot phase in late 2026 and will connect DLT platforms to TARGET Services for settlement, either through existing accounts or via tokenised central bank money issued on an ECB-managed infrastructure. This interoperability-based approach is intended to integrate existing systems with emerging blockchain networks.⁴¹

The second track, Appia, is focused on developing a longer-term, integrated framework for issuing and settling tokenised central bank money within a broader DLT ecosystem. This could involve either an ECB-operated platform or integration with external blockchain infrastructures, enabling central bank money and tokenised securities to coexist within a unified environment.⁴² Over time, Pontes may evolve into or be integrated with Appia, depending on market developments. The ECB aims to interact with the market in various workstreams and release a report in 2028.

As these initiatives progress, wholesale CBDCs are emerging less as a conceptual innovation and more as a practical extension of existing central bank money into new, programmable infrastructures. Adoption of these new forms of interbank settlement assets relies on the uptick of tokenised capital market or correspondent banking platforms that require central bank money settlement.

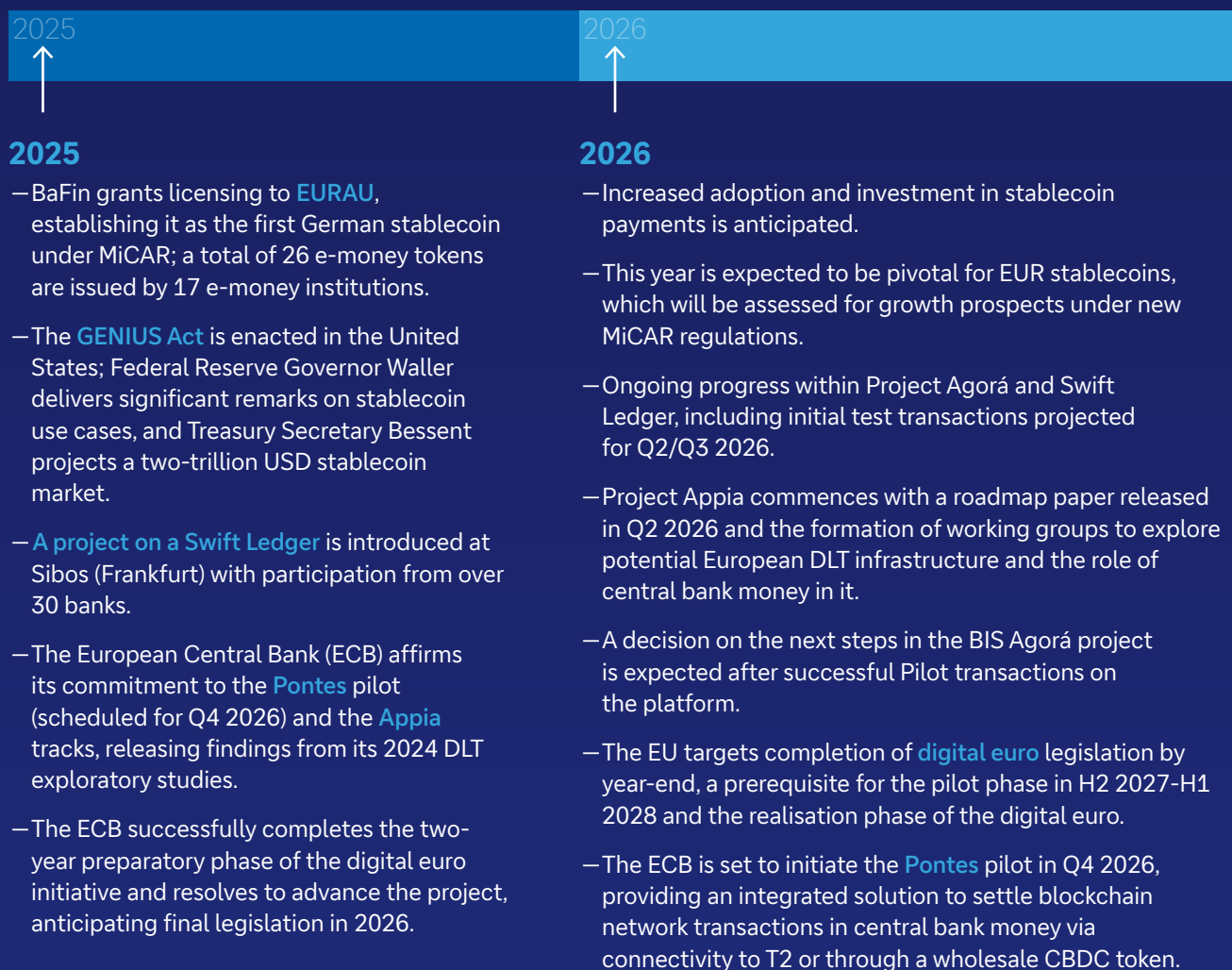
5

Digital money use cases for financial institutions, corporates, and custodians

Having examined the three main types of digital money already entering mainstream payments and market infrastructure landscape, what are the real-world use cases corporates, financial institutions and custodians need to be on top of?

Figure 8 tracks progress from the first German stablecoin under MiCAR in 2025, looking forward to the possible issuance of a digital Euro in 2029.

Figure 8: Selection milestones in the digital money journey





2027

2027

- Finalisation and implementation of the **GENIUS Act** are anticipated in Q1 2027, followed by the conclusion of the CLARITY Act.
- A potential **digital euro** pilot may start in H2 2027-H1 2028, subject to the adoption of requisite regulation in 2026.
- The **Pontes** Pilot progresses, with preparations underway for the final product offering – anticipated to focus exclusively on the wholesale CBDC token rather than T2 integration.

2028

2028

- Continued digital Euro pilot, subject to the adoption of requisite regulation in 2026.
- The Pontes platform is scheduled to go live as a new TARGET service of the ECB in Q1 2028, enabling capital market settlements utilizing tokenised central bank money. The T2 integration will cease to exist.

2029

2029

- Issuance of the **digital euro** is possible, contingent upon the legislative timeline and successful product-build for a potential phased go-live.

5.1 Digital money and corporates

As digital money continues to evolve, corporate treasurers face a rapidly changing range of payment and settlement options.

Stablecoins are gaining traction for cross-border and B2B transactions, offering potential speed and cost advantages, particularly in regions with inefficient legacy systems. Yet, widespread adoption is still limited by the need for robust custody solutions, seamless on- and off-ramping, and integration with existing cash management and treasury infrastructures.

Tokenised deposits currently support internal bank liquidity movements but promise broader utility in multi-bank and correspondent banking scenarios, contingent on industry-wide cooperation, regulatory support, and standardised interoperability. Wholesale CBDCs are reshaping interbank settlement, and while corporates may not access these systems directly, they stand to benefit from faster, more reliable cross-border payments and capital market transactions.

Meanwhile, retail CBDCs – most notably the digital euro – present future opportunities for payment acceptance, though significant changes to treasury operations are unlikely in the near term.

Taken together, these innovations offer corporate treasurers new avenues to optimise liquidity, streamline payments, and strengthen financial resilience, with immediate opportunities already emerging, but broader transformation hinging on further market and regulatory developments.



5.2 Digital money and financial institutions

Digital money rails are increasingly relevant for financial institutions because they can introduce programmable money and workflows that can reduce frictions in cross-border payments and tokenised market activity, while still requiring operational and regulatory readiness to scale.

Stablecoins can be used as interbank settlement assets for certain capital-markets and cross-border flows (as an alternative to other settlement assets such as a wholesale CBDC), benefiting from always-on transferability on blockchain rails.

The key constraints are integrating stablecoins into existing settlement and control processes and ensuring sufficiently liquid, reliable on/off-ramping at institutional scale.

Tokenised deposits can underpin next-generation correspondent banking by enabling end-to-end orchestration across involved banks, including pre-screening and more 'atomic' execution that reduces breaks, reconciliations and investigations, while also supporting 24/7 value transfer. On tokenised asset platforms, they can provide the cash leg for delivery-versus-payment (DvP) using commercial bank money as the settlement asset. In a forward-looking set-up, multi-bank tokenised-deposit networks can also enable intraday FX and liquidity management when paired with wholesale CBDC.

The core constraints remain clear: achieving true multi-bank interoperability – underpinned by shared rulebooks and governance – alongside a credible settlement asset, and deep integration into bank operating models across messaging, booking, liquidity, controls and compliance. Without these foundations, deployment at scale will remain limited.

Wholesale CBDC can act as a central-bank money settlement asset on blockchain rails to enable settlement between banks and, in the target state, support 24/7 settlement in central bank money. In the euro area today, limitations cited include the lack of on-chain settlement finality and 24/7 capability for a EUR wholesale CBDC token, with the Eurosystem progressing Project Pontes and the longer-term Appia roadmap to address these gaps over time.

Retail CBDCs, such as the Digital Euro in the EU, are primarily a public payments instrument that banks will need to enable. However, it is not designed as an interbank settlement rail and therefore does not provide an interbank use case for banks' wholesale cross-border settlement needs.

5.3 Digital money and custodians

As payments infrastructure moves toward a 24/7, always-on model, a parallel shift is emerging on the asset side, where markets are beginning to operate on the same continuous basis.

To support this, a large number of institutions are accelerating tokenised issuance efforts. For example the Depository Trust & Clearing Corporation (DTCC) has been given the green light by the Securities and Exchange Commission to develop a tokenisation service for a defined set of highly liquid assets, including the Russell 1000 – representing the 1,000 largest publicly traded US companies by market capitalisation – as well as ETFs tracking major indices and US Treasury bills, bonds and notes.⁴³

In September 2025, Euroclear and Clearstream announced initial steps towards digitising the Eurobond market,⁴⁴ the world's third-largest debt market valued at around €14trn.⁴⁵ Several global banks have also announced their own digital asset programmes. To keep pace with these developments, custodians must prepare for a future where they are able to provide services 24/7, supported by control frameworks that enable this.

All of this marks a clear departure from legacy models built around batch processing and cut-off times. It also requires custodians to support a broader range of assets – not just cryptoassets such as Bitcoin or Ethereum, but tokenised versions of traditional securities, including those governed by frameworks such as MiFID in Europe rather than MiCA (see [2.3.2 European Union](#)).

The other key development is the growing role of wallet infrastructure as a primary entry point for clients into their banks. As a result, custody becomes increasingly critical – as the point where clients hold their money and digital assets. Custodians will need to abstract away underlying complexity, ensuring that the appropriate instrument is used for each transaction, whether that is a stablecoin, a tokenised deposit or a form of CBDC.

Convertibility between assets will also become central. A stablecoin used for a cross-border payment, for example, may need to be converted as soon as it reaches a wallet into a yield-bearing instrument such as a tokenised money market fund, and then potentially into a tokenised bond pledged as collateral. Managing this full lifecycle – seamlessly and at speed – will be a core responsibility for custodians and they will need to prepare for the task.

References

1. <https://defillama.com/stablecoins>
2. Source: Deutsche Bank Research, Visa Chain Analytics. Mastercard and Visa annual reports. Summarised in the Deutsche Bank Research report *Stablecoins: How the GENIUS Act strengthens US geopolitical dominance*, by Marion Laboure and Camilla Siazon (25 September 2025)
3. <https://www.congress.gov/bill/119th-congress/senate-bill/1582>
4. <https://home.treasury.gov/news/press-releases/sb0197>
5. <https://www.federalreserve.gov/newsevents/speech/miran20251107a.htm>
6. <https://www.esma.europa.eu/esmas-activities/digital-finance-and-innovation/markets-crypto-assets-regulation-mica>
7. <https://allunity.com/news/allunity-secures-bafin-emi-license-to-launch-its-micar-compliant-euro-stablecoin/>
8. <https://www.circle.com/pressroom/circle-is-first-global-stablecoin-issuer-to-comply-with-mica-eus-landmark-crypto-law>
9. <https://danskebank.com/news-and-insights/news-archive/press-releases/2025/pr25092025>
10. <https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/stablecoin-issuers/>
11. https://www.sqpc.gov.sg/api/file/getfile/Media%20Release_MAS%20Finalises%20Stablecoin%20Regulatory%20Framework.pdf
12. <https://www.ledgerinsights.com/japanese-bill-plans-to-expand-stablecoin-assets-other-crypto-changes/>
13. https://www.sec.or.th/EN/Pages/News_Detail.aspx?SECID=11613&utm
14. [white-paper-stablecoin-payments-truth-behind-numbers.pdf](#)
15. Ibid.
16. Ibid.
17. [Mastercard Incorporated – Mastercard to Acquire BVNK to Connect On-Chain Payments and Fiat Rails](#)
18. [Stripe completes Bridge acquisition](#)
19. <https://www.circle.com/pressroom/circle-announces-usdc-smart-contract-for-transfers-by-blackrocks-buidl-fund-investors>
20. <https://www.bcg.com/assets/2026/white-paper-stablecoin-payments-truth-behind-numbers.pdf>
21. Ibid.
22. [B2B payments with stablecoins: Integrating SAP ERP... – SAP Community](#)
23. <https://partior.com/>
24. <https://www.bis.org/about/bisih/topics/fmis/agora.htm>
25. <https://www.swift.com/news-events/press-releases/swift-add-blockchain-based-ledger-its-infrastructure-stack-groundbreaking-move-accelerate-and-scale-benefits-digital-finance>
26. <https://www.swift.com/news-events/news/swifts-blockchain-based-shared-ledger-progresses-mvp-implementation>
27. <https://www.mas.gov.sg/schemes-and-initiatives/project-guardian>
28. <https://www.bis.org/publ/othp73.pdf>
29. <https://www.congress.gov/bill/119th-congress/house-bill/1919>
30. <https://www.bankofengland.co.uk/the-digital-pound>
31. <https://www.theasset.com/article/55233/china-upholds-e-cny-strategy-sniffs-at-stablecoins>
32. https://www.ecb.europa.eu/euro/digital_euro/html/index.en.html
33. https://www.ecb.europa.eu/euro/digital_euro/pilot/html/index.en.html
34. https://www.ecb.europa.eu/pub/pdf/scpwps/ecb_wp2980-5f64961c8f.en.pdf
35. <https://wero-wallet.eu/>
36. <https://www.europeanpaymentscouncil.eu/news-insights/insight/transforming-payments-spain-impact-instant-and-international-payments-and>
37. <https://www.bis.org/about/bisih/topics/fmis/agora.htm>
38. <https://www.bankofengland.co.uk/payment-and-settlement/rtgs-renewal-programme>
39. <https://paymentsindustryintelligence.com/finality-secures-136m-to-expand-blockchain-settlement-network/>
40. <https://www.bankofengland.co.uk/news/2025/november/boe-mas-bot-to-explore-synchronised-fx-settlement-across-borders>
41. <https://www.ecb.europa.eu/press/pr/date/2025/html/ecb.pr250701~f4a98dd9dc.en.html>
42. <https://www.ecb.europa.eu/press/pr/date/2026/html/ecb.pr260311~14ddf51a77.en.html>
43. [Paving the Way to Tokenized DTC-Custodied Assets | DTCC](#)
44. [Euroclear and Clearstream to digitise Eurobond market – Euroclear](#)
45. https://www.euroclear.com/newsandinsights/en/Format/Articles/energising-the-siu.html?utm_source=chatgpt.com



This document is for information purposes only and is designed to serve as a general overview regarding the services of Deutsche Bank AG, any of its branches and affiliates. The general description in this document relates to services offered by Deutsche Bank Corporate Bank within Deutsche Bank AG, any of its branches and affiliates to customers as of May 2026, which may be subject to change in the future. This document and the general description of the services are in their nature only illustrative, do neither explicitly nor implicitly make an offer and therefore do not contain or cannot result in any contractual or non-contractual obligation or liability of Deutsche Bank AG, any of its branches or affiliates.

Deutsche Bank AG is authorised under German Banking Law (competent authorities: European Central Bank and German Federal Financial Supervisory Authority (BaFin)) and, in the United Kingdom, by the Prudential Regulation Authority. It is subject to supervision by the European Central Bank and the BaFin, and to limited supervision in the United Kingdom by the Prudential Regulation Authority and the Financial Conduct Authority. Details about the extent of our authorisation and supervision by these authorities are available on request.

Copyright© May 2026 Deutsche Bank AG. All rights reserved.