

A sceptic's guide to digital assets

Part 2: Stablecoins and Central Bank Digital Currencies (CBDCs)

The total market value of digital assets is c£2.2tn. Stablecoins represent a little over 10% of this market, with the majority held in cryptocurrency and a negligible amount held in Central Bank Digital Currencies (CBDCs) at the moment. This paper focuses on stablecoins and CBDCs, which are the closest you can get to “cash” on the blockchain. While they may appear to fulfil similar criteria, in reality they offer quite a different function.

Stablecoins and CBDCs are two important components of digital finance, each valuable in different ways and worth examining closely.

Stablecoins are now the second-largest part of the digital asset landscape, sitting behind cryptocurrencies. They've become the go-to medium of exchange across decentralised markets, essentially the ‘digital cash’ of the blockchain world. Their growing scale also means they carry real systemic weight, making it more important than ever to understand how they work and why they matter.

Central Bank Digital Currencies (CBDCs) are essentially a digital version of today's fiat money, the currency issued and backed by governments. They're designed to bring greater efficiency to the financial system and could sit alongside traditional central bank money in everyday use. With major pilots already running at national scale in countries like China and India, CBDCs are quickly moving from concept to reality, making it increasingly important for pensions schemes to understand what they are and how they might shape the future of money.

Our three part series

1

In part one, we explained how the digital asset market works and how blockchain technology could pave the way for a faster, lower cost finance industry.

2

In this guide, part two, you'll discover the important and distinct roles that stablecoins and CBDCs will play in digital finance.

3

Part three, the final in our series, will explore how tokenisation could revolutionise real world investing.



Stablecoins in some form will serve an essential role in digital finance given the physical impossibility of using cash on blockchain. They are only as good as their underlying collateral, and this is an area of surprising differentiation.

Simeon Willis
Chief Investment Officer



At a glance

Stablecoins

- **Stablecoins function as “digital cash” (the money of the blockchain world)**, acting as the primary medium of exchange across decentralised markets.
- **They facilitate the efficiency gains of blockchain infrastructure** through faster settlement, reduced intermediation and lower transaction costs.
- Confidence in a given a stablecoin hinges on the **peg to its reference asset**, such as a fiat currency, and the **credibility** of its collateral backing.
- The stablecoin market exhibits characteristics of a **natural monopoly** and is likely to consolidate to a small number of issuers.
- Failure of a major stablecoin could have **major systemic consequences**, given the reliance on stablecoins as a medium of exchange and store of value. Other assets such as tokenised deposits, which offer similar features, may supercede stablecoins.
- A **new regime** is scheduled to come into force on **25 October 2027**, which will impact crypto assets, requiring firms wishing to provide associated services in, or to, the UK to be authorised and supervised by the FCA.

Central Bank Digital Currencies (CBDCs)

- CBDCs are issued by central banks on controlled, central-bank-managed infrastructure. They **represent a digital form of sovereign currency**. However, they are not generally intended to be freely tradable across different blockchains.
- **They provide faster and cheaper transaction settlement** compared to traditional banking systems.
- **Adoption is slow in the West** - Europe, including the UK, and the US remain in the research and development stage of a CBDC, with no formal decision yet on whether they will launch a CBDC.
- **CBDCs raise important questions around privacy and financial stability**. Supporters see them as a modern form of central bank money, but policymakers are cautious that, depending on how they are designed, they could give public authorities greater visibility over transactions and make it easier for money to move quickly out of commercial banks in times of stress.
- **CBDCs are up and running elsewhere** - China and India are running large-scale pilots to test real-world usage, while three jurisdictions, the Bahamas, Nigeria, and Jamaica, have fully launched CBDCs.
- **Regulatory progress and adoption are slow**, as issuance of a CBDC requires legislation, and lawmakers are concerned over privacy and financial risks, hence spending time to get this right.



Stablecoins

Stablecoins are a digital asset whose value is tied to a reference asset, such as a traditional fiat currency, like the US dollar. Whilst most are designed to track a fiat currency, others track completely different assets such as gold.

Role

Stablecoins have a **legitimate role** in streamlining financial infrastructure. They act as “digital cash” (the **money of the blockchain world**) that makes blockchain investment markets possible. As traditional currencies do not trade on the blockchain, stablecoins serve as the essential medium of exchange within blockchain ecosystems. They allow value to circulate entirely **on-chain** (without leaving the blockchain or reverting to traditional banking). Similar to cash-like instruments, they typically do not pay interest, reflecting their primary purpose as a high-liquidity transactional asset rather than a yield-generating investment.

Stablecoins are essential to make blockchain ecosystems function like modern financial systems rather than simple trade networks. However, scope for users to retain anonymity has made them attractive for illicit activities, prompting regulatory scrutiny.

A currency or a security?

If a stablecoin is treated as a **currency**, it is regulated like a payment instrument, by payments and banking regulators. If it is treated as a **security** (an investment product), it falls under stricter securities laws by securities regulators such as the U.S. Securities and Exchange Commission (SEC), which enforces rules designed for investments such as disclosure rules, registration requirements, and investor-protection obligations. This affects how it can be issued, traded and marketed.

Stablecoins are generally treated as a form of digital **currency** rather than a security, though the distinction depends on how they are structured and marketed.

When they are pegged to fiat currencies such as the US dollar and fully backed by cash or cash equivalent reserves, regulators tend not to consider these to be securities. Instead, they function more like a payment instrument or digital dollar, enabling efficient transactions within blockchain ecosystems.

However, if a stablecoin is structured in a way that promises profits to holders, such as yield bearing tokens or those marketed as investment opportunities, then they may fall under **securities law**.

On-chain or off-chain: What's the difference?

- **On-chain** means an action happens directly on the blockchain and is recorded there for everyone on that network to see.
- **Off-chain** means an action happens outside the blockchain, often through a bank, company, or separate system, and is not recorded directly on the blockchain.

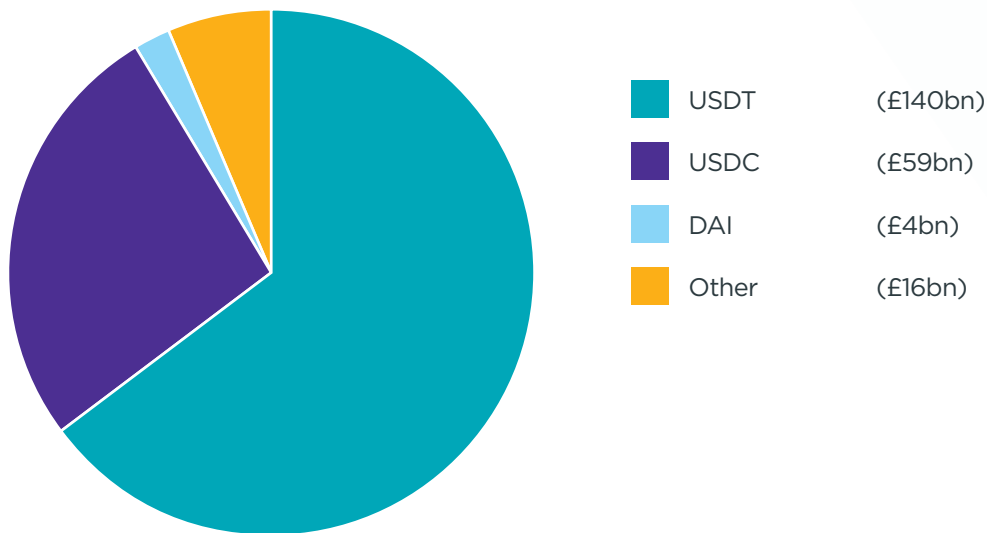


The stablecoin market

The total digital assets market is £2.2tn and stablecoins represent just over £200bn.

The stablecoin market exhibits characteristics of a **natural monopoly**, where users gravitate toward a few trusted issuers. The largest two stablecoins, **Tether (USDT)** and **USD Coin (USDC)**, account for most of the market volume and usage, with USDT leading the stablecoin market with a circulating supply of c.£140bn as at 31 March 2026, followed by USDC with £59bn, followed by **DAI** with £4bn.

Chart 1: Market value of stablecoins as at 31 March 2026



Source: TradingView

Backing collateral

For institutional investors, confidence in a stablecoin mainly hinges on two factors - the peg to its reference asset and the credibility of its collateral backing.

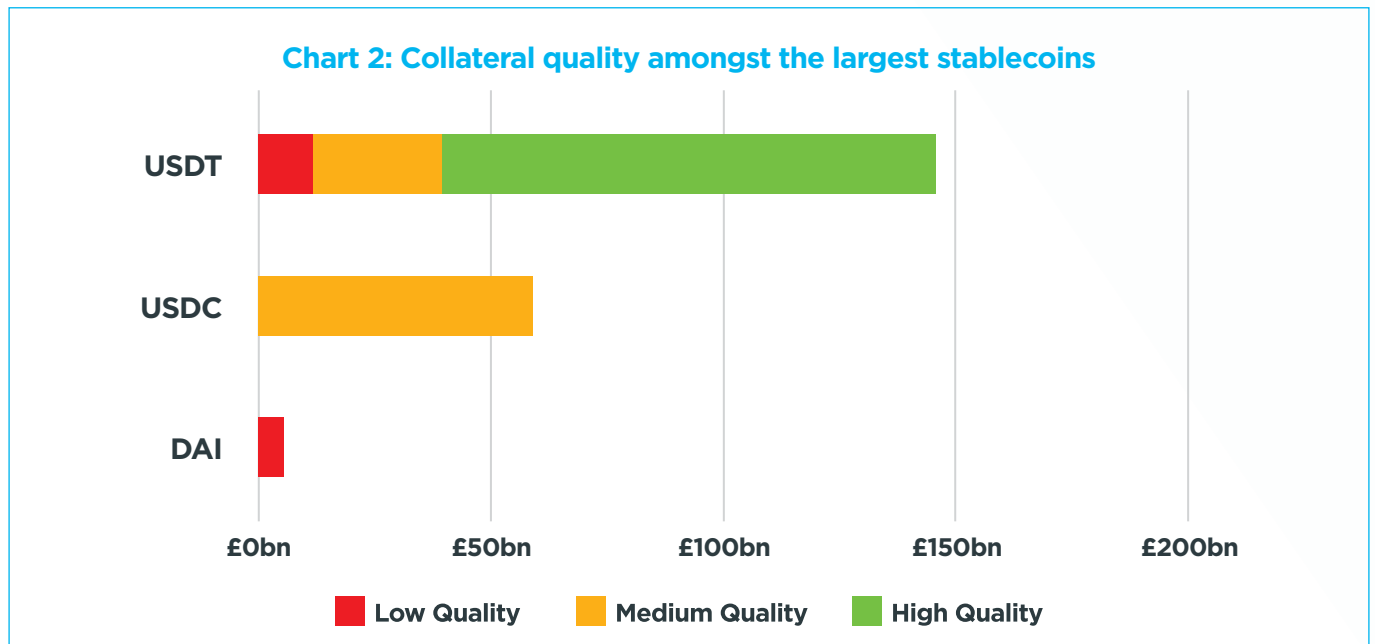
In this section we explore the composition and quality of that backing collateral.

There are lots of different types of stablecoins available, we also see large variation in the backing collateral - this includes the amount, the risk and the quality of collateral behind each.

Type of stablecoins

- **Fiat-backed stablecoins** (for example USDC) are backed by cash or cash-like assets, usually linked to a currency such as the US dollar. This is designed to keep their value steady.
- **Commodity-backed stablecoins** (for example PAX Gold, which falls within the "Other" category in the chart above) are backed by physical assets such as gold. Their value moves with the value of that asset.
- **Crypto-collateralised stablecoins** (for example DAI) are backed by other digital assets such as Ethereum. Because these assets can be volatile relative to the peg, extra collateral is usually held as a buffer. However, they can still be risky if the value of the backing assets falls sharply or if the underlying code does not work properly.
- **Algorithmic stablecoins** use software and supply controls to try to keep a stable value, rather than being backed by assets. They operate a bit like a central bank buying reserves or selling reserves where demand falls or rises. These are the riskiest type and rely heavily on market confidence and have often failed when that confidence disappears.

Looking at the collateral backing of the market's largest stablecoins, USDC is fiat-backed, making the stablecoin relatively low-risk, while USDT includes some volatile assets so its stability may be questioned. The DAI, although crypto-collateralised and therefore exposed to market volatility, is considered higher quality than USDT because it is over-collateralised and more transparent. Under S&P Global's stablecoin stability assessment (rated from 1 = very strong to 5 = weak), USDC received a score of 2, USDT was rated 5 (due to its exposure to high-risk assets and persistent disclosure gaps), and DAI was rated 4.



Source: USDT - Tether's "Assurance report according to ISAE 3000R on the financials figures and reserves report"
 USDC - Deloitte's independent accountants' report
 DAI - DeFi Explore

Collateral classification

Collateral	Includes
High quality	U.S. Treasury bills • Overnight reverse repo agreements Term reverse repo agreements • Money market funds • Cash & bank deposits
Moderate quality	Corporate bonds • Precious metals • Secured loans
Low quality	Crypto assets • Public equities • 'Other investments'

Systemic effects

If a major stablecoin fails, it could cause wider problems across financial markets, especially because the market is dominated by a small number of large issuers.

The level of risk depends on what sits behind the stablecoin. If it is backed by safe, easy-to-sell assets like cash or short-term government bonds, investors can usually redeem their money without much disruption. But if the backing assets are harder to sell or have uncertain values, large withdrawals could force the issuer to sell quickly at low prices, which can damage confidence and break the stablecoin's link to its target value.

There can also be wider market effects. Some stablecoins are backed by government bonds, so if many investors withdraw at once, the issuer may need to sell those bonds. That can push bond prices down and yields up, adding pressure to the broader fixed income market.

Case study: When a stablecoin loses its anchor: the Terra collapse

The collapse of the Terra stablecoin (UST) in May 2022 is an example of things going wrong. UST was a stablecoin intended to stay at \$1, using a link to a cryptocurrency, LUNA. The system worked by letting people swap between UST and LUNA to push UST back toward \$1 whenever it moved. But in May 2022, UST slipped below \$1. The system tried to fix it by creating huge amounts of LUNA. That flooded the market, made LUNA almost worthless, and UST lost its peg completely. This led to a spiral where both UST and LUNA crashed and billions in value were wiped out. UST never recovered its peg and effectively disappeared as a functioning stablecoin.

Regulation of stablecoins

Stablecoins are becoming more regulated around the world, with clearer rules on what backs them, how investors get their money back and how users are protected.

- The **US** is now supporting dollar-backed stablecoins. New rules under the Genius Act require them to be fully backed, more transparent and supervised by regulators.
- **Europe** has introduced a detailed set of rules for stablecoins under MiCA (Markets in Crypto Assets Regulation). These are designed to protect users and make the market safer, with stricter rules still to come.
- The **UK** is developing its own rules for stablecoins, focusing on ensuring they keep their value and can be redeemed properly. More formal regulation is expected from 2026.

Summary

Stablecoins are a key part of digital finance, acting as the “cash” of blockchain markets by allowing fast settlement, fewer intermediaries and lower transaction costs. However, they also bring risks. In periods of stress, stablecoins backed by weaker or less liquid assets can come under pressure, showing how important the quality of the backing assets really is. As regulation develops and operational risks become better understood, we expect the rules around stablecoins to become more robust and more demanding.



Central Bank Digital Currencies (CBDCs)

Central Bank Digital Currencies may appear to fulfil similar criteria to stablecoins, but in reality, they offer quite a different function.

CBDCs are issued by central banks and represent a digital form of sovereign currency. Unlike traditional physical currency, they exist purely in electronic form, which allows them scope to be programmed for specific uses, enables faster and cheaper transaction settlement, and provides a clear audit trail. Their **value is tied to the sovereign currency** and since their value is backed by the government, they are intended to be as safe and reliable as traditional currency. Unlike cryptocurrencies, CBDCs are centrally controlled and are intended to replicate the role of cash or complement it.

On-chain capability

CBDCs are not generally designed to be freely tradable across blockchains. They are issued on controlled, central-bank-managed infrastructure rather than open public networks. This means a digital pound might exist only within the Bank of England's chosen system or systems. Unless the Bank of England deliberately designs the digital pound to be portable across multiple blockchains, it won't be tradable outside its native system. This is where stablecoins will still play a crucial role where the digital currency is to be used.

Is creating CBDCs similar to quantitative easing?

Although both a CBDC and quantitative easing (QE) involve central bank money creation, they work in fundamentally different ways. QE increases the quantity of central bank money by creating new digital reserves into the financial system and uses them to buy government bonds and other assets from financial institutions.

In contrast, a CBDC represents a new form of the currency in which the public can hold and use.

So far, CBDC pilots and live CBDCs have tended not to expand the money supply. They have converted existing cash or bank deposits into CBDC at a 1:1 rate.



While CBDCs are unlikely to arrive overnight in the the UK, they could have a meaningful role in the years ahead as economies better understand and adopt the digital world of finance.

Faye Clark
Head of Manager Research



Who's adopting CBDC?

Some countries, including China and India, are running large scale pilots of their own CBDC, while three countries, Bahamas, Nigeria, and Jamaica, have fully launched a CBDC. Europe, UK, and US, are only in the research and development phase of a CBDC, with no formal decision on whether they will launch one.

Country	CBDC	Status	Launch date	Where it can be used
Bahamas	Sand Dollar	Fully launched (National rollout)	2020	Retail payments across islands
Nigeria	eNaira	Fully launched (National rollout)	2021	Retail payments and government transfers
Jamaica	JAM-DEX	Fully launched (National rollout)	2022	Retail payments; merchant adoption growing
China	eCNY	Pilot (Largest CBDC pilot globally - Trillions of yuan in cumulative pilot transactions)	2020	Retail payments, public transport, government salary pilots, P2P transfers, tourist onboarding via airport kiosks
India	e ₹	Pilot (Second largest CBDC pilot globally)	2022	Retail payments, transport, shops, restaurants, P2P transfers
Kazakhstan	Digital Tenge	Pilot (Expected near-term issuance)	2023	Retail and government linked pilots
Brazil	Digital Real	Pilot	2023	Retail and wholesale pilot use cases
Russia	Digital Ruble	Pilot	2023	Retail payments, selected merchant pilots
UK	n/a	Research	n/a	n/a
US	n/a	Research	n/a	n/a
Europe	n/a	Research	n/a	n/a

Fully launched CBDCs

The fully launched CBDCs in the Bahamas, Nigeria, and Jamaica are all technically stable and functioning as intended, but real-world adoption remains low. In all three cases, the challenge is not technology but uptake. Public awareness is limited, merchant acceptance is limited and existing digital payment options already meet most users' needs.

Focusing on Western economies - research and early development

Bank of England (BoE): The digital pound remains in the research phase, with work currently focused on developing a detailed blueprint. The BoE has not decided whether they will introduce a digital pound.

European Central Bank (ECB): The digital euro project is moving forward, supported at a high political level across the EU. The ECB has indicated that if the required regulation is approved in 2026, the digital euro could be introduced from 2029.

U.S. Federal Reserve: The Federal Reserve is continuing to explore the potential benefits and risks of CBDCs from a variety of angles through technological research and experimentation. No decision has been made on whether the US will issue a CBDC.

CBDC limitations

For CBDCs, regulatory progress is slow because issuance requires legislation, and most major economies have not passed the legislation required to issue a CBDC.

The main concerns about central bank digital currencies, or CBDCs, are privacy and financial stability. Because they are run by central banks, people worry that governments could have more visibility over transactions. There is also a risk that, in times of stress, people could quickly move money out of commercial banks and into CBDCs, putting pressure on the banking system and reducing banks' ability to lend.

China has pushed ahead further than Western countries, but that is largely because its political system and banking model make these concerns easier to manage. China has tried to limit the risks by capping holdings and making its CBDC more like digital cash than a bank account. Even so, these protections may not fully hold in a severe crisis. In Western economies, privacy concerns and the risk to bank deposits remain much bigger barriers to adoption.

Summary

CBDCs are a type of digital money issued by a central bank. Progress to launch CBDCs has been slow as this requires new legislation and raises concerns about privacy and the possible impact on the wider banking system.

In countries such as the US, UK and across Europe, central banks are still exploring the idea, and no final decision has been made to launch one. Even if a CBDC is introduced, it is not yet clear how much demand there would be right now - but we could see adoption more favourable in the future as the digital finance world develops - central bank money will need to evolve too.

Find out more

For further information, please get in touch with Faye Clark, Simeon Willis or speak to your usual XPS contact.



Faye Clark
Head of Manager Research

 faye.clark@xpsgroup.com



Simeon Willis
Chief Investment Officer

 simeon.willis@xpsgroup.com



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Glossary

Given the complexity of the digital assets space, which is unfamiliar to many, we have produced a glossary with a definition of each term in a normal and simplified version.

Term	Definition	Simplified Definition
Bitcoin	The first blockchain based currency, introduced in 2009 by the pseudonymous creator Satoshi Nakamoto.	The first and biggest cryptocurrency, created in 2009.
Blockchain	A decentralised ledger system that is shared across a network, storing transactions in order and making them visible to all participants, while keeping the accounts involved anonymous.	A shared online bookkeeping record, which everyone can see and which no single person controls.
Consensus	The collective agreement among blockchain participants on the accuracy and validity of recorded transactions.	Agreement among participants in the network about the blockchain's state.
Consensus Algorithm	A set of rules that allow blockchain participants to agree on the validity of transactions and the state of the ledger.	Rules that help blockchain users agree on what's valid.
Cryptocurrency	A form of digital currency secured by cryptographic methods, designed to function without reliance on a central authority.	Digital money that works without banks or any other central authority.
Cryptography	The science of encoding information to protect data and secure communications, essential for blockchain systems.	Using maths to keep information safe and private.
Decentralisation	The distribution of authority and control across multiple participants rather than a single governing body.	Spreading control across many people instead of one authority.
Ethereum	A blockchain network that supports programmable contracts and decentralised applications through its native token, Ether.	A blockchain that lets people build apps and smart contracts.
Gas fee	A payment made to compensate for the computational effort required to process transactions or smart contracts on Ethereum.	A payment to run transactions or contracts on Ethereum.
ICO (Initial Coin Offering)	A fundraising mechanism where new blockchain projects sell tokens to investors in exchange for established cryptocurrencies.	Selling new tokens to raise money for a project.
Ledger	The blockchain's continuously updated record of all transactions, accessible to every participant in the network.	The blockchain's record of all transactions.
Mining	The computational process of verifying blockchain transactions and adding them to the ledger, often rewarded with new coins.	Using computers to check transactions and add them to the blockchain.
Native token	The primary cryptocurrency of a blockchain, typically used to pay fees and sometimes to support governance (e.g., Bitcoin or Ether).	The main coin of a blockchain (like Bitcoin or Ether).
Node	A computer that connects to a blockchain network, helping to validate, store, and distribute transaction data.	A computer that helps run the blockchain network.

Term	Definition	Simplified Definition
On chain	Any activity or transaction that is permanently recorded on the blockchain itself.	Activity that happens directly on the blockchain.
On ramping / Off ramping	On ramping: Converting fiat currency into digital assets. Off ramping: Exchanging digital assets back into fiat currency.	On ramping: Turning cash into crypto. Off ramping: Turning crypto back into cash.
Permissioned blockchain	A blockchain network where access is restricted to approved participants, often used in enterprise contexts.	A blockchain where only approved people can join.
Permissionless blockchain	A blockchain network open to anyone, allowing unrestricted participation in validation and transactions.	A blockchain open to anyone, no approval needed.
Private key	A confidential string of characters that grants control over cryptocurrency funds linked to a blockchain address.	A secret code that lets you access and spend your crypto.
Proof of Work (PoW)	A consensus method where participants solve complex mathematical problems to validate transactions and secure the network.	A system where people use their computers to solve puzzles to confirm transactions. Whoever solves it first gets rewarded.
Proof of Stake (PoS)	A consensus method where validators are chosen based on the amount of cryptocurrency they commit as collateral.	A system where people lock up their tokens to help confirm transactions. Whoever offers to lock up the most tokens will be the validator.
Public key	A cryptographic identifier that can be shared openly to receive funds.	A code you share so others can send you crypto.
Smart contract	Computer code stored on a blockchain that automatically executes agreements when predefined conditions are met, removing the need for external systems to enforce an agreement.	Code on a blockchain that runs automatically when conditions are met.
Token	A digital unit created on a blockchain that can represent value, ownership, or rights depending on its design.	A digital voucher that exists on a blockchain. The voucher can be for many different things: money, ownership of something, or even a right to vote.
Wallet	Software or hardware that manages blockchain addresses and keys, enabling users to store and transact cryptocurrencies.	An app or tool to store and use cryptocurrencies.