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Stablecoins 2030

Web3 to Wall Street

Citi Institute

Global Perspectives & Solutions

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> The movement towards using blockchain technology for instantaneous settlement and real-time confirmation is a natural progression towards a 24x7, always-on world and something we have already been investing in. We are focused on integrating and commercializing it with our other client offerings and are excited about the future benefits we will be able to unlock.
>
> *Shahmir Khaliq, Global Head of Services, Citi*

Foreword

Ronit Ghose
Global Head, Future of Finance, Citi Institute

Ryan Rugg
Global Head of Digital Assets, Citi Services

Back in April (Citi GPS: Digital Dollars), we argued that 2025 would be blockchain's ChatGPT moment, with stablecoins igniting the shift. Just six months later, that transformation is unfolding at remarkable pace.

Cryptocurrency company listings, record fundraising and breakthroughs in technology all suggest that institutional adoption is accelerating.

This summer has brought a raft of announcements, especially by digitally native companies, to bring stablecoins to commerce and real-world activities. In addition, existing crypto-driven stablecoin activity has continued to grow. Issuance volumes are up from approximately $200 billion at the start of 2025 to about $280 billion.

We are revising our stablecoin total issuance forecasts in this report to: $1.9 trillion base case (previously $1.6 trillion) and $4.0 trillion bull case ($3.7 trillion), due to the strong growth of the market in the past six months and the wide range of project announcements, in the U.S. and internationally.

The evolution of digital assets – stablecoins, tokenized deposits, deposit tokens – feels in some ways like the early days of the dotcom boom. Skeptics once again proclaim that banks will be disintermediated. But we don't believe crypto will burn down the existing system. Rather it is helping us reimagine it.

We are excited by the opportunities presented by stablecoins, but they are not the answer to everything. Domestic consumer payments in many countries work well: they are already real-time, 24x7 and low-cost. Cross-border payments are a different matter, but fintechs and big banks have made rapid progress here too.

Stablecoins may be a vital addition to the finance toolkit, especially for digitally native companies and investors, as well as frontier market households looking for an easy way hold dollars. But for many, bank tokens – deposit tokens, tokenized deposits and similar – will be an easier integration.

We believe that the turnover of bank tokens could exceed stablecoins by 2030, even with a small shift of current traditional rails on chain. It is not a digital format war that we foresee. But a continued progress towards smarter, faster finance.

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Web3 to Wall Street

Stablecoins are a catalyst for blockchain's ChatGPT moment in institutional adoption. This GPS report examines the rapid evolution of stablecoins and their growing role in the future of money. We update our stablecoin forecasts to issuance volumes of $1.9 trillion in our base case and $4.0 trillion in our bull case, revised upwards from our April 2025 estimate of $1.6 and $3.7 trillion respectively.

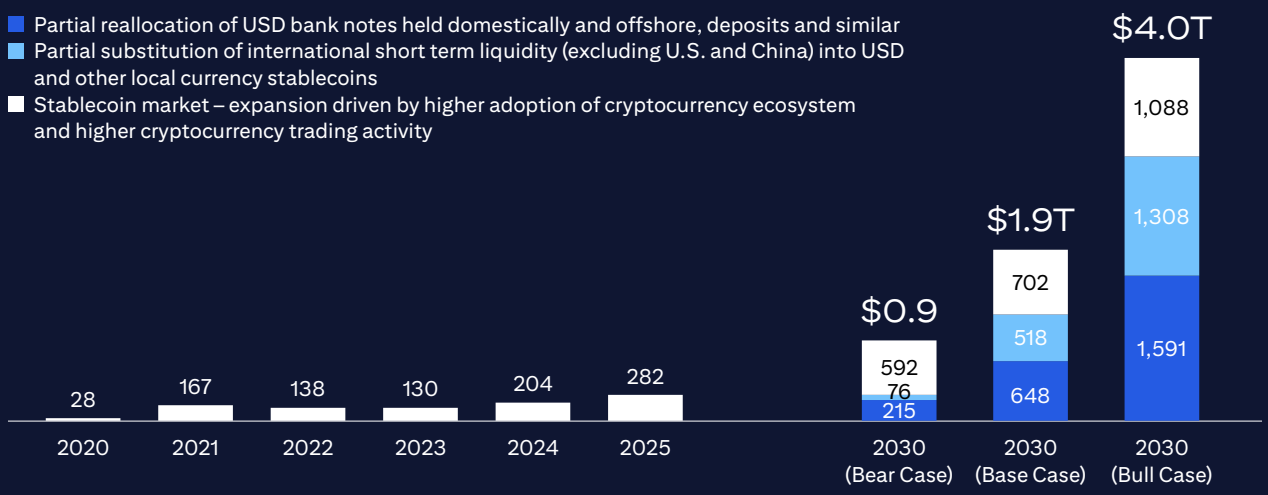
Stablecoins growth remains primarily driven by the (1) crypto-native ecosystem, (2) e-commerce and digitally native companies and (3) offshore/ international demand for holding USD.

While we are positive on the growth outlook for stablecoin usage, we believe they will co-exist with other on-chain money formats, especially bank tokens (tokenized deposits, deposit tokens, and hybrids). Together, these formats are driving the broader growth of the on-chain finance market.

Most mainstream corporates are currently curious rather than enthusiastic about stablecoins and enjoy faster and cheaper payments than crypto industry talking points.

Bank tokens, with characteristics such as trust and privacy, will remain preferred by many. We believe 2030 transaction volumes for bank tokens may exceed stablecoins (see page 25-26).

Estimating Stablecoin Market Size by 2030 ($ billion)



Source: Federal Reserve Bank, Bank of England, European Central Bank, PBOC, Citi Institute.

Note: Bear/bull/base case estimates are Citi Institute's.

Key Takeaways

1. In our April 2025 Citi GPS: Digital Dollars, we argued 2025 would be a ChatGPT moment for the institutional adoption of blockchain. The past six months have confirmed this, with digitally native companies leading the "real world" charge.
2. Reflecting rapid YTD growth and new project announcements, we revise our 2030 base case estimate for stablecoin issuance to $1.9 trillion (previously $1.6 trillion) and bull case to $4.0 trillion (previously $3.7 trillion).
3. At 50x velocity (see page 24), similar to fiat payment velocity over time, stablecoins could support nearly $100 trillion in transaction activity by 2030 (base case). The same velocity for our bull case (market size $4.0 trillion) would imply $200 trillion.
4. We see an ecosystem where stablecoins, tokenized deposits, deposit tokens, and CBDCs can all flourish and co-exist. Different forms of money will find different product market fit with usage shaped by trust, interoperability, and regulatory clarity.
5. Bank tokens (tokenized deposits, deposit tokens, and similar), offering the trust, familiarity and regulatory safeguards of bank money, are preferred by many corporates. 2030 bank token transaction volumes could exceed stablecoins.
6. Large corporate treasuries are interested in programmability, enabling real-time settlement/reconciliation, compliance embedded at the point of transaction, and fewer friction points. These can be offered by bank tokens and stablecoins.
7. On-chain money volumes are likely to remain heavily USD denominated and are a source of incremental new demand for U.S. treasuries. However, HK, UAE and other innovative hubs are also hot spots of activity – this is not just about USD.
8. While our annual turnover forecasts for stablecoins (base case: $100 trillion) and bank tokens (above $100 trillion) may appear large to the layperson, this is still small relative to money flows: leading banks move $5-10 trillion per day today.[1]

$1.9 trillion

Our revised base case estimate for 2030 stablecoin issuance

0.5

Stablecoin institutional adoption, on a scale of zero to ten [2]

$100-140 trillion

Estimated transaction volume using bank tokens (tokenized deposits, deposit tokens, hybrids) by 2030 [3]

[1] J.P.Morgan Payments Newsroom, Silent Night: Behind the Scenes of Peak Payments Season, 28 July 2025 and Yahoo Finance, How Citi and JPMorgan's Blockchain Moves Influence Payments, 14 August 2025.
[2] Catherine Gu, Head of Institutional Client Solutions, Visa.
[3] Citi Institute.

Mapping the Future of Money

The momentum behind stablecoins and on-chain money is no longer a story of unregulated finance and innovation theatre. Earlier this year, in our April Citi GPS: Digital Dollars report, we argued that stablecoins would make 2025 a ChatGPT moment for institutional blockchain adoption.

Why Now?

In the United States, the recently passed GENIUS Act is a game changer.

On the day of the Senate's successful vote, Treasury Secretary Bessent tweeted his support for the stablecoin legislation as pro-innovation, pro-dollar and pro-consumer.

The $3.7 trillion market forecast referenced in Secretary Bessent's tweet is from our April 2025 Citi GPS: Digital Dollars report.

Given the strong momentum in the past six months, we are raising our original forecasts, especially the base case.

> Recent reporting projects that stablecoins could grow into a $3.7 trillion market by the end of the decade.
>
> That scenario becomes more likely with passage of the GENIUS Act. A thriving stablecoin ecosystem will drive demand from the private sector for U.S. Treasuries, which back stablecoins. This newfound demand could lower government borrowing costs and help rein in the national debt.
>
> It could also on-ramp millions of new users – across the globe – to the dollar-based digital asset economy. It's a win-win-win for everyone involved: the private sector, the treasury, and consumers.
>
> These are the fruits of smart, pro-innovation legislation.
>
> *United States Secretary of the Treasury*[4]

[4] (@SECSCOTTBESSENT) ON X, 17 June 2025.

Today we expect stronger stablecoin growth compared to 6-9 months ago. However, this does not mean that we are more bearish on other digital and on-chain money form factors. We do not believe in on-chain wars. We believe that many digital form factors will flourish.

Transportation and the movement of people can be compared with the movement of money. In the 1960s, Japan built the Shinkansen high speed railway network, in time for the 1964 Tokyo Summer Olympics. This ran alongside existing rails.

Many European countries have also built fast trains, such as the French TGV, alongside and on top of existing rails. The U.S., by contrast, has focused on cars and planes. If trains are analogous to stablecoins, the TGV is tokenized deposits.

No One Size Fits All

Just as some countries build completely new train tracks in parallel to existing systems, or integrate them into existing rails, or chose to focus on different transport modes altogether, so the future of finance will unfold.

> Much of today's crypto infrastructure will fade into the background, just as hardware/software did with the internet...We are still in the dial-up phase, but as we move towards the broadband era of blockchain, the focus will shift. In five years, we won't be talking about blockchains, we'll be talking about results and activities in the space.
>
> *Dante Disparte, Chief Strategy Officer and Head of Global Policy/Operations, Circle*

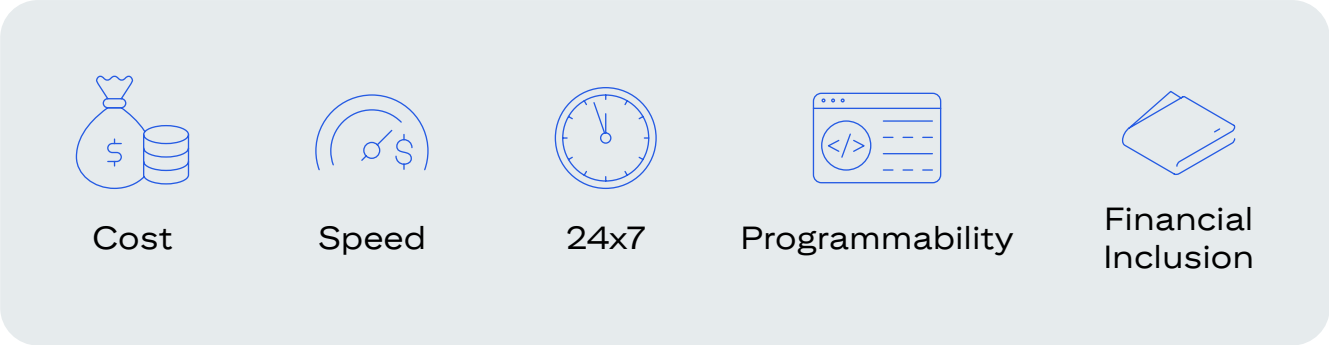
A common misconception is that a single digital or blockchain money format will dominate. That this is a race with winners and losers. Or a digital money format war of sorts. VHS versus Betamax, smartphones versus feature phones.

All on-chain money has shared benefits. Just as email is 24x7, instant, borderless, similarly blockchain creates settlement rails for money. Stablecoins or tokenized deposits are fast, cheap, always-on, programmable and easy to access.

Of course, there are many nuances to this discussion. Domestically, for consumers and smaller merchants, real time domestic payments exist in 80+ countries.[5] Cross border, these payment speeds slow. Internet based communication or financial transfers do not slow due to borders.

The digitally native or crypto native firms are running ahead of traditional corporates on stablecoin implementation. However, as we will discuss in detail below, not all corporate treasury operations are set up to operate 24x7, nor do all want such a flexibility.

Figure 1. Key Benefits of On-Chain Digital Money



Source: Citi Institute

Multiple on-chain money formats will co-exist. Use of a specific format will be dependent on characteristics such as trust, interoperability, and regulatory clarity as illustrated in figure 2.

[5] Volt, Real-Time Payments Map, Updated on January 2025.

Figure 2. Characteristics of Different Money Formats

	STABLECOINS	TOKENIZED DEPOSITS	DEPOSIT TOKENS	CBDCS	TRADITIONAL RAILS
Level of trust and counterparty risk	?	✓	✓	✓	✓
Scale and transaction volume	?	?	?	?	✓
Regulatory clarity	?	?	?	✓	✓
Interoperability	✓	?	?	?	✓
Programmability	✓	✓	✓	?	✗
Privacy	?	✓	✓	✓	✓
Access and inclusion	✓	?	?	✓	?
24x7 availability	✓	✓	✓	✓	?

✓ Strong fit ? Moderate fit/contect dependent ✗ Limited fit/not suitable

Source: Citi Institute

There are multiple formats for on-chain money, from CBDCs, tokenized deposits to bank-issued stablecoins and deposit tokens, each offering a different approach to enabling always-on, programmable value transfer.

Stablecoins are privately issued digital assets. They are typically backed by high-quality short-term securities or cash-like assets. They operate on public or permissionless blockchains. They are not legal tender, unlike CBDCs.

Figure 3. Digital On-Chain Money Formats

	STABLECOINS	DEPOSIT TOKENS/ TOKENIZED DEPOSITS	CBDCS
Issuer	Non-bank entities or banks (in some cases)	Regulated commercial banks	Central banks
Backing Assets	Reserves (cash, T-bills, commercial paper, crypto, etc.)	Deposits in commercial bank accounts	Direct liability of the central bank
Regulation	Varies: some are regulated (e.g., USDC), others less regulated	Subject to banking regulation and supervision	Issued and governed by central bank laws and regulation
Risk Profile	Depends on issuers transparency and reserve quality	Similar to holding a traditional bank deposit	Lower risk vs. stablecoins
Use Cases	Retail payments, crypto trading, Decentralized Finance (DeFi), remittances	Institutional payments, programmable finance, settlement	Retail and wholesale payments, financial inclusion, monetary policy

Note: Tokenized deposits are token representation of the commercial deposits where each token is backed by retail or institutional deposits. Whereas a deposit token is the native token on blockchain which directly represents the retail or institutional deposits in form of tokens. Most bank projects to date can be classified as "tokenized deposits". Deposit tokens are mostly in pilot or early stages, such as Project Guardian, the Regulated Liability Network (RLN) or Project Helvetia.
Source: Citi Institute

Surge in Stablecoin Supply

Stablecoins have seen rapid growth in both supply and transaction volume in recent years. As shown in figure 4, aggregate supply has surged to $280 billion in September 2025, up from approximately $200 billion at the start of 2025. Stablecoin transaction volumes, especially USDC, have also increased.

> Stablecoins were initially created as digital dollars by centralized crypto exchanges like Bitfinex to work around the lack of access to regulated bank accounts. Tether acting as the first digital dollar provided a stable unit of account, unlocked inter-exchange liquidity, and played a critical role in moving crypto towards mainstream use. Later, Circle's USDC enabled exponential growth of blockchain native financial products and services like Aave and Uniswap.
>
> *Ajit Tripathi, Head of Financial Institutions, Avail*

Stablecoin volumes today remain largely driven by crypto trading and related activities. The largest stablecoin, USDT, launched in 2014. It expanded to the Ethereum blockchain in 2017, enabling its use in Decentralized Finance (DeFi). In 2019, it further expanded to the Tron network, widely used in Asia, due to its faster speed and lower costs. USDT has largely operated offshore, but times are changing.[6]

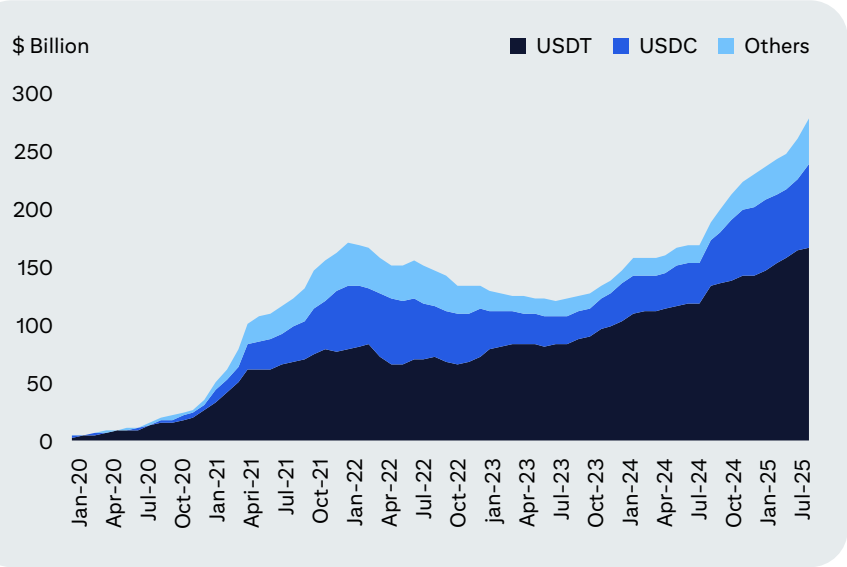
Summer 2025 has been dubbed "Stablecoin Summer" by industry participants.[7] New business activity around stablecoins, for solutions including commerce, payments and "real world" applications, have heated up over the summer. We believe these could further power issuance and transaction volumes during 2026 and beyond.

[6] The information, Tether Eyes Issuing New Stablecoin for U.S. Market, April 2025.
[7] Grayscale, June 2025: Stablecoin Summer, 01 July 2025

> Institutional adoption of stablecoins is still in its very early stages, maybe 0.5 on a scale of 0 to 10. But we are seeing serious institutional interest in the space across banks, asset managers, and other financial institutions.
>
> *Catherine Gu, Head of Institutional Client Solutions, Visa*

Figure 5 highlights how transaction volumes in stablecoins, once negligible, now measure in the trillions of dollars annually – scaling rapidly compared to other traditional payment systems. On an adjusted basis, stablecoin volumes are running close to $1 trillion per month in August 2025, nearly double the levels from just a year ago.[8]

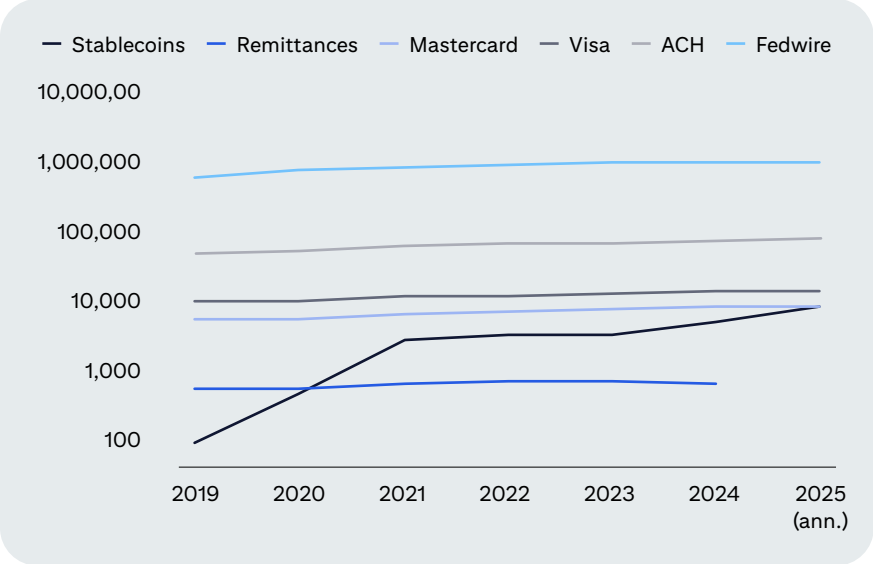
Figure 4. Stablecoin Supply, 2020-2025



Note: Data aggregated monthly.
Source: Artemis Analytics, Citi Institute

[8] See Visa's analysis of stablecoin transactions publicly available on visaonchainanalytics.com – the adjusted transaction volume data are based on methodology agreed by Visa and partners attempts to remove potential distortions in the data created from activity such as high-frequency trading and bots.

Figure 5. Stablecoin Transaction Volume vs Other Modes ($ Billion)



Note: Logarithmic scale.
Source: Fedwire, ACH, Mastercard, Visa, Allium, World Bank, Citi Institute

Today, stablecoins are not just seen as a tool for crypto trading, but as infrastructure for 24x7 liquidity and real-time money movement. That said, adoption, particularly in the institutional space, remains in its infancy.

> Stablecoin issuance volume is up 40% this year as executive orders, the GENIUS Act, and major platforms remove friction and build confidence in adoption.
>
> *David Cunningham, Head of Strategy/ Partnerships, Digital Assets, Citi Services*

The U.S. SEC Chairman, Paul S. Atkins, unveiled Project Crypto on 31 July 2025, a commission-wide effort to modernize U.S. securities regulation for digital assets.[9] This aims to implement recommendations from the President's Working Group Report on Digital Asset Markets that seeks to establish a clear regulatory framework to classify crypto tokens as security, commodity, or others.

One of the proposals include a unified licensing regime, akin to super-apps, allowing firms to offer a full suite of digital financial services (trading, staking, lending, etc), under a single regulatory umbrella. The SEC has also launched a regulatory fast lane (innovation exemption) to enable firms to introduce new technologies and business models without being constrained by legacy rules. This exemption is rooted in principles-based compliance, aligned with investor protection goals.

Tokenized securities are also in focus, with Commission staff directed to work with financial firms issuing stocks, bonds, and funds directly on blockchains, providing tailored relief where appropriate.

> Regulatory change is unshackling large organizations. The door has been opened for bank liabilities to live on public chains. Tokenized cash will be connected to tokenized funds already there.
>
> *David Cunningham, Head of Strategy/ Partnerships, Digital Assets, Citi Services*

Across the European Union, the Markets in Crypto-Assets Regulation (MiCAR) entered into force in 2024 and cover electronic money tokens. In Asia and the Middle East, the central banks are building regulatory sandboxes and licensing regimes for stablecoin providers, setting the stage for further institutional adoption.

For example, Hong Kong introduced licensing rules for stablecoins in August 2025 to help strengthen trust, transparency, and oversight.

[9] U.S. Securities and Exchange Commission (SEC) Speech, American Leadership in the Digital Finance Revolution, 31 July 2025.

Beyond regulations as a catalyst, other factors driving mainstream interest in stablecoins and on-chain money include:

- **Payment network integration:** Major card networks and payment processors are beginning to support stablecoin settlement. This gives end-users and merchants a familiar on-ramp, allowing them to adopt stablecoins without overhauling existing systems.
- **New layer-1 chains:** A wave of new layer-1 blockchains is being launched, many designed specifically for financial applications. They emphasize faster settlement finality, lower fees, and enterprise-grade compliance features. For end-users, this expands the range of stablecoin networks to choose from, encouraging competition, innovation, and reducing dependence on a handful of legacy chains.
- **Bank-issued tokens:** Banks are introducing tokenized deposits, though most currently operate in closed, institution-specific silos. While not interoperable yet, they reflect rising demand for digital money within traditional finance and offer corporates lower counterparty and reputational risk compared to public-chain stablecoins. Some banks are also piloting other formats such as deposit tokens and private stablecoins.
- **Institutional market infrastructure:** Core infrastructure for issuing, storing, transferring, and settling digital money is steadily improving and reaching production-grade maturity. This includes exchange acceptance, custodial integration, and clearing and settlement.
- **Growth of tokenized financial assets:** As more financial assets from bonds and equities to commodities are tokenized, a corresponding form of digital money is needed for settlement. Stablecoins provide the liquidity and interoperability required to trade these assets seamlessly on-chain, becoming the default settlement layer for tokenized markets.

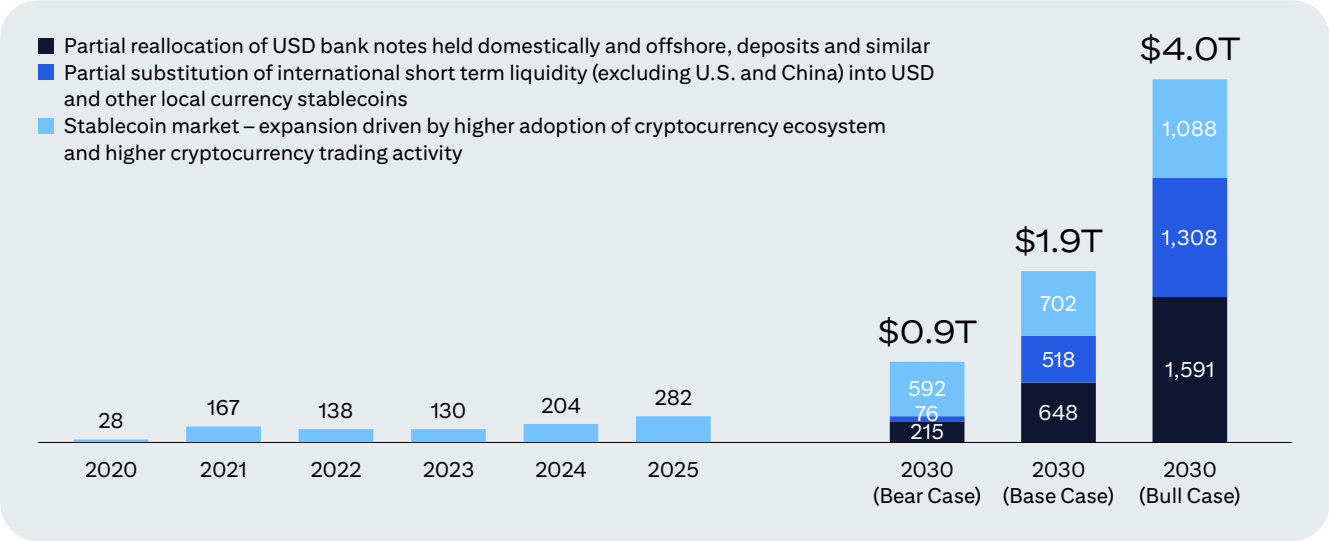
Sizing the Stablecoin Market

In our April 2025 Citi GPS: Digital Dollars, estimated the stablecoin market could reach $1.6 trillion by 2030 under our base case, with a bull case of $3.7 trillion and bear case of $0.5 trillion.

Since then, market momentum has accelerated. Stablecoin issuance volumes continue to expand, growing over 20% in the last six months and nearly 40% year-to-date. There is strong momentum in the ecosystem led by integration by payment networks, new layer-1 blockchains, and regulatory clarity in key markets.

Reflecting this rapid growth and stronger adoption by corporates, financial institutions, and payment ecosystems, we now revise our base case estimate to $1.9 trillion by 2030, with the bull case rising to $4.0 trillion and bear case to $0.9 trillion.

Figure 6. Estimating Stablecoin Market Size by 2030 ($ billion)



Source: Federal Reserve Bank, Bank of England, European Central Bank, PBOC, Citi Institute

It is important to note that this more positive view on stablecoin usage does not imply a bearish view on other forms of digital money. As stated earlier in the chapter, we do not see an on-chain war, but rather a diverse ecosystem where stablecoins, tokenized deposits, deposit tokens, and CBDCs can all flourish and co-exist, each suited to different use cases and institutional preferences.

Figure 7 provides a detailed look at how we arrive at our market size estimates. We can break this down into three key components:

1. Reallocation of short-term liquidity (45% of base case)

Almost half of our base case stablecoin issuance forecast of $1.9 trillion is from deposit substitution in the U.S. and overseas. We model stablecoin demand equivalent to 2.5% of 2030 U.S. bank system deposits driven by the growth of digitally native companies (including e-commerce) promoting it as a means of payments and an in-platform token. We assume total bank system deposits grow at the same rate as nominal GDP 2025-2030 and the 2.5% substitution is equivalent to roughly a half year's growth in 2030 deposits. The 2.5% partial substitution in the base (and 2x that in the bull case) references an average of 5% for money market funds relative to total deposits in the first 10 years (1974-1984) and 13% after 10 years.

There will also be a switch of international deposits and liquidity into stablecoins held outside the U.S., either in USD or USD linked currencies (e.g., HKD, AED).

Globally, excluding the U.S. and China, we model 2030 stablecoin issuance to be equivalent of 0.75% of deposits, or an amount approximately equal to onshore Stablecoin demand.

For reference, the offshore Eurodollar market experienced rapid expansion in the 1970s, growing from $42 billion in 1970 to $925 billion in 1982,[10] as participants increasingly sought dollar assets outside the U.S. banking system to benefit from regulatory. By the late 1970s, offshore Eurodollars were about as big as onshore dollars. Stablecoins, largely USD driven, could follow a similar trajectory with offshore held tokens matching onshore.

2. Growth of public cryptocurrency markets (40% of base case)

Our base case forecast assumes a continuation of the crypto related stablecoin issuance run rate observed over the past three years, or approximately 20% annually. In our bull case, we project a faster annual growth trajectory of 30%, driven by increasing regulatory clarity and rising allocation of institutional capital into cryptocurrency assets. The cryptocurrency markets are often highly volatile, and the related stablecoin issuance numbers could vary widely – in bull and bear markets.

3. Reallocation of banknotes (nearly 15% of base case)

Our base case forecast assumes 10% substitution of U.S. banknotes held overseas into stablecoins. We reference this to the experience of gold ETFs, which captured nearly 8% of the investible gold bars and coins market by offering a lower-friction investment vehicle.[11] Stablecoins could capture a similar share supported by easier digital access and stronger adoption in emerging/frontier markets.

In the U.S., we estimate a 2.5% substitution of domestically held banknotes with stablecoins, reflecting a broad shift to digital. We model this by referencing it to the use of cash for POS transaction values across the U.S., which is set to decline 5% over 2024 to 2030.[12]

Globally (ex-U.S. and China), we assume 0.5% of local currency banknotes switching to stablecoins. This represents a similar of total stablecoin demand as the share of U.S. banknotes held overseas (8%).[13] We assume that the increased ease of access USD via stablecoins will lead to greater demand for USD and equivalent assets. This is particularly likely in the case of some emerging/frontier countries where weaker currencies and hyper-inflationary pressures could make USD-backed stablecoins attractive as a perceived store of value.

[10] Yener Altunbaş, Blaise Gadanecz & Alper Kara (2006) The evolution of syndicated loan markets, The Service Industries Journal.
[11] World Gold Council, Gold Market Primer – Market Size and Structure, 2023.
[12] WorldPay, The Global Payments Report, 2025.
[13] WorldPay, The Global Payments Report, 2025.

Figure 7. Stablecoin Market Size 2030

REGION/ SECTORS	DRIVERS	BEAR CASE ($ BILLION)	BASE CASE ($ BILLION)	BULL CASE ($ BILLION)
UNITED STATES	**Substitution of a part of overseas U.S. currency holdings from banknotes to stablecoins** (Total 2030E USD bank notes in circulation held outside the U.S. $1.5 trillion)	1.00% $15 billion	10.0% $149 billion	25.0% $372 billion
	Substitution of a part of domestic U.S. currency holdings from banknotes to stablecoins (Total 2030E USD bank notes in circulation held within the U.S. $1.8 trillion)	1.00% $18 billion	2.50% $45 billion	5.00% $91 billion
	Reallocation of a part of U.S. short-term liquidity held at banks, such as savings and current accounts held by households and companies (Total 2030E bank deposits: savings and current $18 trillion)	1.00% $182 billion	2.50% $454 billion	5.00% $908 billion
	Reallocation of a part of U.S. term deposits and retail money market funds (MMFs) if interest bearing stablecoins are issued (Total 2030E near-term term deposits and retail MMFs $4 trillion)	– –	– –	5.00% $221 billion
REST OF THE WORLD (EX-U.S., CHINA)	**Substitution of a Global M0 excluding U.S. and China** (Total 2030E M0 money supply of $21.8 trillion)	0.10% $22 billion	0.50% $109 billion	1.00% $218 billion
	Reallocation of a part of global short-term liquidity held at banks, such as savings and current accounts held by households and companies excluding U.S. and China (Total 2030E bank deposits: savings and current $54.5 trillion)	0.10% $55 billion	0.75% $409 billion	1.00% $545 billion
	Reallocation of a part of global term deposits and retail money market funds (MMFs) excluding U.S. and China if interest bearing stablecoins are issued (Total 2030E near-term term deposits and retail MMFs $54.4 trillion)	– –	– –	1.00% $544 billion
EXISTING STABLECOIN MARKET	**Growth in stock of stablecoin supply in line with growth of public cryptocurrency markets where stablecoins are used as a settlement or on/off ramps; as well as growth of institutional adoption of public cryptocurrencies assets and usage of blockchain** (Bear case: stablecoin supply to grow 16% CAGR from current market size; Base case: growth assumed to be average of last three year's CAGR, i.e., 20%; and Bull case: stablecoin supply to grow 31% CAGR from current market size)	16.0% $592 billion	20.0% $702 billion	31.0% $1,088 billion
	Approximate Stablecoin Market Size, 2030 ($ billion)	900	1,900	4,000

Note: 2030 stock of monetary aggregate (Cash in circulation, M0, M1 and M2) is calculated using nominal GDP growth. Euro Area and United Kingdom could see local currency stablecoin issuance and adoption. China likely to adopt sovereign CBDC and less likely a foreign privately issued stablecoin. 2030E non-USD stablecoin estimate for bear case: $21 billion; base case: $136 billion and bull case: $298 billion.
Source: Federal Reserve, Bank of England, European Central Bank, DeFi Llama, Citi Institute

Measuring Stablecoin Velocity

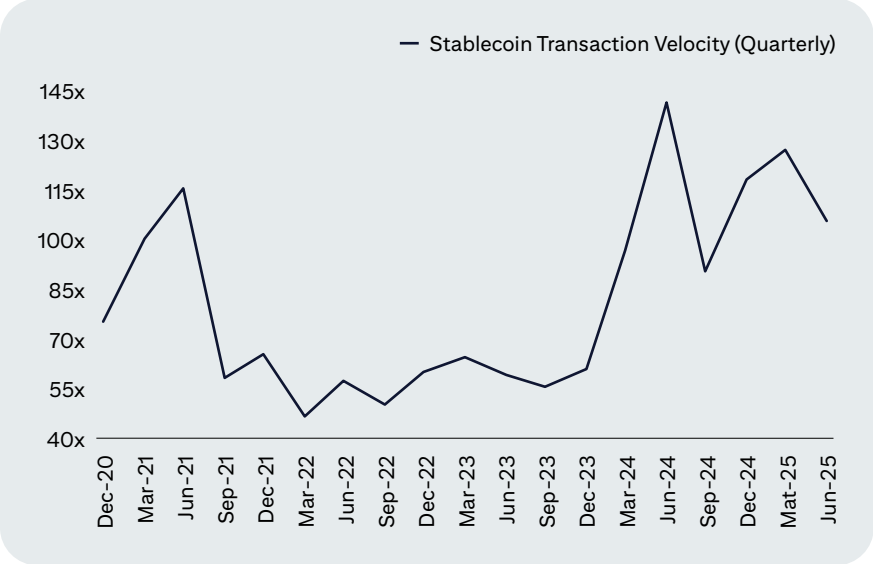
Estimates of current stablecoin transaction and transfer volumes differ materially across analytics providers. Some report only on exchange volumes while others track total on-chain transfer value, with further nuance around adjusted/organic volumes that filter out automated smart-contract activity, internal transfers and wash/bot trading.

Data from Artemis Analytics, based on on-chain analysis, estimates adjusted stablecoin transaction volume of $7.6 trillion in 2023 and $18.4 trillion in 2024 (+140% YoY).

Historically, stablecoins were used mainly for crypto trading related activity. Based on average annual outstanding stablecoin supply and Artemis Analytics adjusted transaction volumes, stablecoin velocity stands at 60x in 2023 and 113x in 2024.

As corporates, financial and asset managers adopt programmable money, stablecoins will be used for financial and commercial transactions. Future velocity ratios are hard to forecast, but figure 9 on page 25 provides a scenario analysis we consider reasonable.

Figure 8. Current Stablecoin Transaction Velocity, 2020-2025



Note: Calculated on adjusted transaction volume data aggregated monthly.
Source: Artemis Analytics, Citi Institute

Figure 9. Sensitivity for Stablecoin Transaction Volumes, 2030

STABLECOIN MARKET SIZE	STABLECOIN ADJUSTED TRANSACTION VELOCITY		
	25X	50X	75X
Bear Case ($0.9 trillion)	$23 trillion	$45 trillion	$68 trillion
Base Case ($1.9 trillion)	$48 trillion	$95 trillion	$143 trillion
Bull Case ($4.0 trillion)	$100 trillion	$200 trillion	$300 trillion

Note: Calculated on adjusted transaction volume data aggregated monthly
Source: Artemis Analytics, Citi Institute

For our base case (issuance market size $1.9 trillion), and assuming 50x velocity, stablecoins could settle nearly $100 trillion of transactions annually by 2030. The same velocity for our bull case (market size $4.0 trillion) could reach $200 trillion. The 50x velocity is similar to the average for traditional rails (2023: 52x and 2024: 54x).

Measuring Potential for Bank Tokens

Banks have launched blockchain native deposits (deposit tokens), digital twins (tokenized deposits) and hybrid formats. Estimating the size of these "bank tokens" is an imprecise science given how early we are in the process. The bank token market could easily become bigger than stablecoins.

The world's largest banks already transfer $5 trillion to $10 trillion daily through existing payment systems. If only 1 percent of these volumes moved over to "bank tokens", this would amount to $12.5 trillion -$25 trillion at individual big global banks on an annual basis.

A key advantage of "bank tokens" it that they often do not require entirely new plumbing from the end-user perspective. As they are direct digital representations of commercial bank money, they can be integrated more easily into existing treasury, ERP, and payment workflows.

While most bank tokens will run on private blockchains or hybrid public/private chains for the foreseeable future and hence lack the interoperability and easy access of stablecoins, the adoption of bank tokens will be anchored in corporate treasury and institutional flows, rather than retail.

One top-down approach to forecasting bank token transaction volumes is to use Bank for International Settlements (BIS) data on global large-value payment volumes, which totalled $1.7 quadrillion in 2023. Assuming 5% of these payments were conducted in bank tokens by 2030, it would give us transaction volumes in the $100 trillion to $140 trillion range.

Figure 10. Bank Tokens (Tokenized Deposits/Deposit Tokens) Market Size 2030

PERCENT OF VALUE USING BANK TOKENS	GLOBAL LARGE PAYMENT VOLUMES		
	$2,000 TRILLION	$2,400 TRILLION	$2,800 TRILLION
2.5%	$50 trillion	$60 trillion	$70 trillion
5.0%	$100 trillion	$120 trillion	$140 trillion
7.5%	$150 trillion	$180 trillion	$210 trillion

Note: [1] Based on BIS CPMI statistics, value of large-value payments worldwide totaled $1,723 trillion in 2023.[2] For 2030 forecast of global large-payment volumes, a modest 2% CAGR results in total volumes of approx. $2,000 trillion; 5% CAGR in $2,400 trillion volumes; and 7% CAGR in $2,800 trillion volumes.
Source: Bank for International Settlements, Citi Institute

Large value payments include transfers that are primarily real-time gross settlement (RTGS) systems, or hybrid systems, that handle high-value wholesale payments, such as Fedwire (U.S.) or CHAPS (UK).

Why Do We Need On-Chain Money?

Payments and financial infrastructure continue to improve. The standard pitch for on-chain money and finance which we see in many VC pitch decks and blogs is as follows: traditional rails are slow (3-5 days), expensive (6% fees), opaque and limited to “banking hours”.

Some of the “crypto/VC” critique of traditional finance is directionally fair. But it misses many important nuances. Outside the U.S. particularly, many countries, rich and poor, have real time domestic payment systems. Cross-border payments are indeed slower than domestic infrastructure, but even here settlement times have rapidly improved.[14]

[14] SWIFT, Swift Cross-Border Payment Processing Speed Stretches Further Ahead of G20 Target, 17 October 2024.

For large corporates, established scale and relationships already secure favourable pricing – lower transaction fees, tighter FX spreads and sometimes even faster settlement. In such cases, stablecoins may not deliver meaningful direct cost savings over existing arrangements.

As stablecoin issuers face bank-like supervision, with increased obligations around compliance, reporting, and reserve management, cost structures and speed could gradually converge with those of traditional banking. Declining yields on reserves over time, could also push issuers to raise platform fees, especially for high-volume activity, as we have seen in a few instances.

> High TPS demonstrates the capacity for stablecoins to move at speed, but it's important to recognize that traditional payment rails aren't necessarily slow simply because of throughput limits. Their delays often come from layers of compliance, checks, and settlement processes.
>
> *Nick Ducoff, Head of Institutional Growth, Solana Foundation*

Over time, the competitive edge of stablecoins and on-chain money may rely less on narrow transaction cost advantages and more on programmability and real-time integration. Even in the near term, the cost and speed advantage of stablecoins may not matter as much once you factor in the friction of on/off ramps between on-chain money and fiat rails.

Of course, the above is a perspective from a well-functioning money-centre. If you are a merchant or a consumer based in many frontier markets, moving funds cross border can be much more expensive and slower than for counterparts based in more sophisticated, liberalised financial centres.

Smaller merchants or solo entrepreneurs may also struggle to get paid on time, with long delays in settlement, even for domestic payments. Not surprisingly, businesses operating in Africa, Latin America, or Southeast Asia are increasingly exploring stablecoins for supplier payments, payroll, and cross-border settlements.

Figure 11 below sets out an overview of potential use cases for stablecoins and on-chain digital money.

Figure 11. Potential Use Cases for On-Chain Money

CONSUMER AND RETAIL	ENTERPRISE AND MERCHANT	INSTITUTIONAL AND INFRASTRUCTURE
Crypto-asset trading and DeFi transactions	B2B payments	Interbank settlement
P2P payments and remittances	Financing for SMEs	Capital market transactions
Loyalty programs	Treasury and cash management	Collateral management
Merchant payments	Embedded finance for marketplaces	Tokenization of financial and real-world assets
Cross-border payments	Cross-border enterprise payrolls	Stablecoins-as-a-service

Source: Citi Institute

> Stablecoins have several key use cases across consumer and enterprise payments. While adoption is only beginning to gain momentum, I'm excited about their potential as a settlement currency for capital markets transactions.
>
> *Matthew Blumenfeld, Global Digital Assets Lead, PwC*

> Collateral management is the killer app for stablecoins – enabling real-time, programmable settlement across asset classes. By unlocking capital efficiencies and freeing up balance sheet, it can drive a powerful ripple effect: more credit to businesses, greater liquidity in markets, and a more resilient financial system.
>
> *Caroline Pham, Acting Chairman, CFTC*

Ricardo Correia
Partner, Bain & Company

Stablecoins and the Cross-Border SMB Opportunity

Among the emerging use cases for stablecoins, cross-border B2B payments for small and medium-sized businesses (SMBs) stand out as the most compelling. These firms have historically been underserved when moving money across borders, particularly in emerging markets.

Stablecoins promise to offer a more seamless and transparent mechanism for facilitating such payments. Using models like the "stablecoin sandwich", the complexity of minting, transferring, and redeeming can be abstracted away behind familiar card or wallet interfaces, thereby enhancing useability for the end-user.

While the cost advantage for stablecoins may vary, their value lies in reduced reconciliation burdens, fewer intermediaries, and programmability. Stablecoins can offer a streamlined experience that aligns better with digital-first workflows, particularly in corridors where traditional banking rails remain slow and fragmented.

Implications

Up until recently, stablecoins were a niche product, used mostly in crypto trading. But they are now gaining credibility not as speculative assets, but as infrastructure, playing a pivotal role in 24x7 money movement and real-time liquidity.

Corporate Implications – Real-Time Everything

Stablecoins offer a new way to move money globally with greater speed, transparency and control. For CFOs and Treasurers dealing with cross-border liquidity and payments challenges, on-chain digital money presents a practical solution to the longstanding problem of liquidity latency.

The biggest implication is the shift to real-time everything. Cash no longer sits idle in cut-off windows or multi-day settlement cycles. Corporates can move liquidity continuously across subsidiaries, markets and time zones, allowing treasurers to optimize working capital on a rolling basis rather than end of day. This compresses financial cycles: receivables, payables, payroll and trade settlement can all happen in real-time.

For large multinational enterprises, the potential lies in streamlining global liquidity management and embedding programmability into complex treasury operations. Stablecoins and other forms of on-chain money can facilitate movement of money instantly across subsidiaries, bypassing cut-off times and reducing reliance on correspondent networks. This enables more efficient supply-chain financing, just-in-time working capital, and seamless integration with ERP systems.

While stablecoins have many advantages, for large corporates the incremental benefits on speed and cost may be a lot less significant than assumed by external observers. Large corporates already enjoy preferential banking terms, low fees and have liquidity pools and credit lines in place around the world. They are also focused on regulatory, reputational and audit risks, making them likely to favour “bank tokens” over public blockchain based stablecoins.

For small and mid-sized corporates, the impact of stablecoins and on-chain money is potentially more transformative. These firms often face higher costs, slower settlement cycles, and restricted access to international banking services. On-chain money can help level the playing field, offering near-instant, low-cost payments that improve cash flow management and reduce dependency on intermediaries.

Corporates as Stablecoin Issuers?

Stablecoins are increasingly attractive to digitally native companies and large merchants, offering an opportunity to integrate payments more tightly into their platforms and ecosystems.

> The larger question is what lies ahead when it comes to bigtech and financial services – and how the landscape might evolve if commercial enterprises or corporates begin to enter the financial sector.
>
> *Caroline Pham, Acting Chairman, CFTC*

PayPal launched its own stablecoin (PayPal USD) in 2023. Global players such as Walmart and Amazon are exploring the issuance of proprietary stablecoins, potentially shifting significant transaction volumes from traditional cash and card rails onto their own digital payment infrastructure.[15] Potential drivers include:

- **Streamlined operations:** Simplifies cross-border transactions and reduces reliance on complex correspondent banking relationships.
- **Market access:** Opens access to underserved or hard-to-reach markets where traditional banking infrastructure is limited.
- **Cost reduction:** Lowers transaction fees, particularly for high-volume cross-border payments.
- **Control and flexibility:** Provides greater control over funds, customer data, and the payments experience, enabling innovative financial services within corporate ecosystems.
- **Loyalty and engagement:** Facilitates integration of loyalty programs, rewards, and targeted discounts, strengthening customer stickiness.
- **New revenue streams:** Creates opportunities for float income on reserves and for monetizing value-added payment services.

[15] The Wall Street Journal, Walmart and Amazon are Exploring Issuing Their Own Stablecoins, 13 June 2025.

e-Commerce Giants Gear Up for HKD Stablecoin Issuance

Hong Kong passed stablecoin legislations on 21 May 2025, which became effective on 1 August 2025. The Hong Kong Monetary Authority (HKMA) has also started consultations for a more detailed stablecoins regulatory framework. Three early players have already been in HKMA's sandbox project for about a year.

Potential use-cases include retail and business-to-business payments as well as cross-border settlement of merchandise trade, in addition to other digital assets activities.

e-Commerce giants such as Alibaba and JD.com are actively exploring the issuance of their own HKD-denominated stablecoins as part of broader digital payment and ecosystem strategies.[16,17] A proprietary stablecoin could enable seamless, low-cost transactions across online marketplaces, and enhance user stickiness.

Market participants are also keen for the issuance of yuan/offshore yuan-based stablecoins.[18] If issued, this could be another piece of infrastructure for RMB internationalization.

Some policy observers remain cautious on the short-term likelihood of a yuan stablecoin.[19]

Licensing Timeline: Following the passage of the Hong Kong Stablecoin Bill in May 2025, our Citi Research team expects the participants shortlisted in HKMA's first-batch sandbox to be granted licenses to issue fiat-referenced stablecoins in 1Q2026.[20]

[16] Reuters, Ant Unit Plans to Apply for Stablecoin Issuer License in Hong Kong, 12 June 2025.
[17] South China Morning Post, JD.com Founder Bets on Stablecoins to Cut Cross-Border e-Commerce Transaction Costs, 18 June 2025.
[18] Reuters, China's Tech Giants Lobby for Offshore Yuan Stablecoin, 03 July 2025.
[19] South China Morning Post, Former China Central Bank Governor Urges Caution Amid Stablecoin Frenzy, 28 August 2025.
[20] Citi Research, Hong Kong Multi-Asset, Stablecoins: Assessing FX & Rates Impact, Deciphering Value Chain, 31 July 2025.

The Rush to Build New Layer-1s

In recent months, the layer-1 blockchain space has witnessed a rush of new entrants, from fintechs like Circle and Stripe, to exchange-linked initiatives backed by Bitfinex and Tether, and payment specialists such as Alchemy Pay.

Figure 12. Announcements of New Layer-1 Blockchains for Payments in 2025

COMPANY	NAME OF LAYER-1 BLOCKCHAIN
Circle	ARC
Stripe	Tempo
Bitfinex	Stable
Tether	Plasma
Alchemy Pay	Alchemy Chain

*Names of layer-1s listed above are illustrative but not exhaustive.
Source: Company Reports, Citi Institute

> Existing layer-1s struggle with true settlement finality – many rely on economic finality based on the value of staked assets or a phase of probabilistic finality, meaning there's always a small chance that the transaction could be reversed. Lack of guaranteed finality can be a concern for institutional finance.
>
> *Gordon Liao, Chief Economist and Head of Research, Circle*

The push to launch new layer-1s is not just about adding another blockchain to the mix but about owning the foundational infrastructure for the next generation of payments. The objective is to solve for institutional-grade settlement finality while building a base layer capable of supporting global, always-on money movement.

> If you could somehow combine the best of both worlds. TradeFi tokenization and stablecoins on a single settlement fabric, the opportunity would be staggering. We would increase the velocity of money, i.e., every business/ consumer would become more economically active. No matter where they live.
>
> *Simon Taylor, Go To Market, Tempo*

Owning a layer-1 chain also offers strategic and financial advantages that go beyond the technology. It allows companies to:

- **Control over the network:** Building their own layer-1 allows for greater control in setting fee models, transaction speeds, and governance rules without being dependent on another network.
- **Optimize for specific use cases:** Unlike general-purpose chains, new layer-1 networks can be built for specific purposes like payments, compliance requirements or high volume microtransactions.
- **Capture ecosystem value:** By hosting wallets, merchants, dApps, and developers, the layer-1 issuer gains influence over the wider value chain and application growth.
- **Deeper user and data insights:** Proprietary rails allow companies to own transaction data, enabling advanced analytics and monetization strategies.
- **Strategic independence and resilience:** Reduces dependence on external blockchains, ensuring resilience, competitive advantage and ability to scale globally.

However, building a sustainable layer-1 can pose its own challenge, including the need to achieve critical mass of users, developers and liquidity; ensuring interoperability across multiple networks; and securing the network from exploits while maintaining performance.

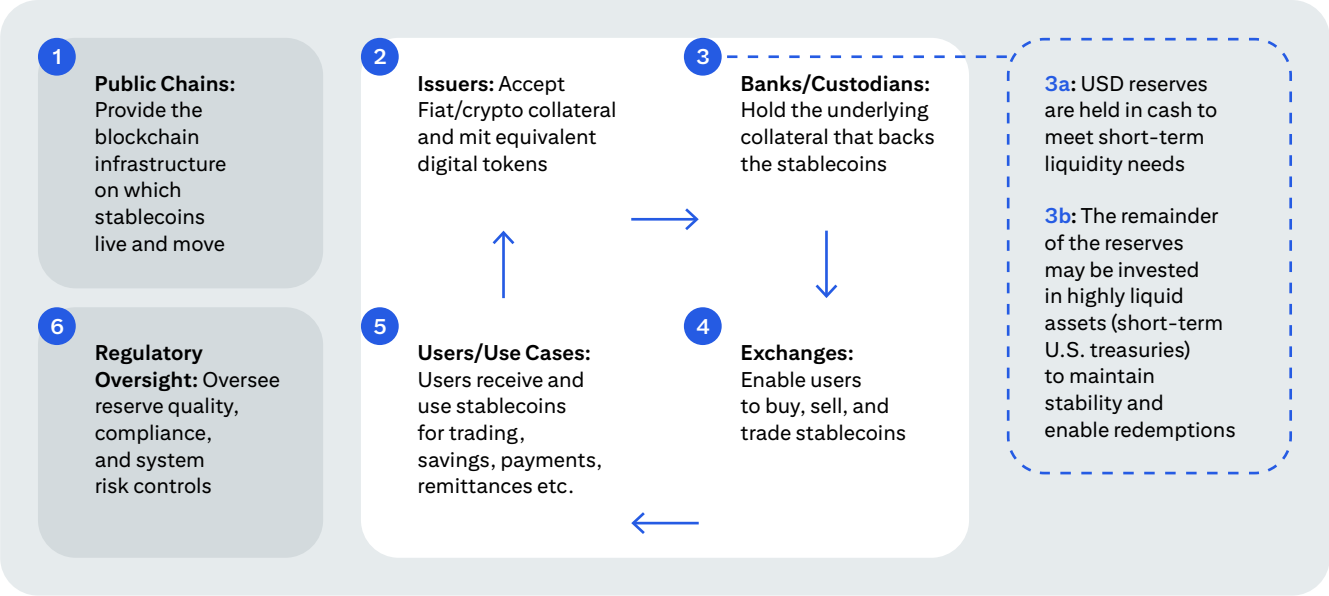
Stablecoin Ecosystem & Fragmentation Ahead

The stablecoin ecosystem spans a network of public blockchains, issuers, custodians, exchanges, end-users, and regulators, each playing a distinct role in issuance, movement, and oversight.

Stablecoins share some similarities with the card industry – high network effects and strong reinforcement loops. The current stablecoins issuer market, similar to the card networks today, is effectively a duopoly.

However, the underlying infrastructure is fragmented across multiple blockchains, institutional custodians, and regulatory regimes

Figure 13. The Stablecoin Ecosystem – Flow and Key Players



Source: Citi

We believe this ecosystem is on the cusp of change led by improving regulatory clarity and is likely to create opportunities for new entrants. While existing duopoly in the issuance market may likely persist in the global or offshore markets, new players are likely to emerge in regional clusters and currency corridors.

> Interoperability will require a synthesis of technology, regulation, and shared standards. Technology provides the clearing layer/acceptance that connects multiple issuers and venues; whilst regulation provides the trust framework...The key is creating a unified redemption network with a consistent rulebook, avoiding siloed implementations that increase systemic friction.
>
> *Nicole Sandler, Chief Ecosystem Officer, Ubyx and Head of Corporate and Regulatory Affairs, CFIT*

Large stablecoins (e.g., USDT, USDC) also often issue their coin on multiple blockchains such as Ethereum, Tron, Solana etc. This multi-chain presence means the underlying blockchain itself is likely to become a competitive battleground for transaction volumes, liquidity supply and developer adoption. Network competition will shape where and how stablecoins are used, which in turn will influence liquidity patterns, adoption and interoperability.

For the end-user, healthy competition, both amongst stablecoin issuers and underlying blockchains, is likely to prove beneficial as it could drive innovation in speed, cost and programmability.

However, stablecoins (like payment networks) thrive on scale and liquidity and extreme fragmentation will mean stablecoins are inherently non-fungible, illiquid, and counterintuitive to mass adoption. This could necessitate more interoperability solutions and bridges, but it also increases the risk of cyberattacks and loss of funds.

Banking in the Age of Stablecoins

The growth of on-chain money, particularly stablecoins, does not signal the end of traditional banking. Importantly, innovation does not always mean replacement – it often means integration.

An example of this is in the early 2000s, when platforms like PayPal emerged with the promise of faster, more digital payments, raising concerns that traditional financial institutions could be left behind. But the industry adapted.

Banks evolved their offerings, modernized their infrastructure, and built the compliance, settlement, and liquidity layers these platforms needed to scale. Today, many of those early disruptors are clients and partners of the banking system. The same dynamic is now unfolding with stablecoins: new rails are being laid, but banks remain foundational to the movement of trusted, regulated money.

Banks bring unique advantages: regulatory trust, deep client relationships, and access to deposit-backed collateral. However, to remain competitive, banks must modernize legacy models and lead in tokenized money market and settlement innovation.

In our Citi GPS: Digital Dollars earlier this year, we highlighted new opportunities for banks in the stablecoin ecosystem including:

- Direct role as stablecoin issuer.
- Custody and reserve management services.
- Treasury brokerage and FX services.
- Liquidity and cash management services.
- Embedding stablecoins for merchant payments and treasury.

We are already seeing large stablecoin issuers rely on regulated banks to safeguard their reserves, provide FX and cash management services, and act as on – and off-ramps for fiat currency. As stablecoin adoption grows, these connections will only deepen.

Yet while the technology is powerful, trusted integration remains key. That's where financial institutions bring unique value: ensuring that digital dollars move with the same confidence, oversight, and regulatory protection as any traditional payment rail.

As businesses plan for the future of finance, it's clear that stablecoins are here to stay. They are not a passing trend, but a new set of digital rails, faster, more flexible, and compatible with traditional banking services. Like past shifts from paper to digital, or batch to real-time, the role of the bank is not eliminated. But it does evolve.

Threat of Deposit Disintermediation

The rise of stablecoins and other forms of on-chain money has raised concerns of disintermediating traditional bank deposits, drawing parallels to the impact of money market funds (MMFs) in the 1980s.

Figure 14 illustrates the drop in share of bank deposits to total household financial assets across the United States from 23.8% in 1980 to 18.8% in 1991. This was marked by an increase in the share of mutual fund holdings (including MMFs) from 1.8% to 7.8% between 1980 to 1991 as a share of total household financial assets.

Figure 14. Distribution of Household Financial Assets in the United States[21]

$ BILLION	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	CAGR
Total deposits	1,513	1,609	1,731	1,946	2,166	2,307	2,482	2,602	2,759	2,871	2,895	2,864	6%
Mutual fund assets	117	208	256	256	320	418	608	685	724	873	935	1,186	23%
includes money market funds	65	156	189	158	200	211	251	279	306	392	439	459	19%
Pension fund reserves	916	997	1,156	1,350	1,498	1,795	2,063	2,182	2,451	2,848	2,963	3,710	14%
Household financial asset	**6,355**	**6,759**	**7,327**	**8,069**	**8,591**	**9,712**	**10,672**	**11,239**	**12,227**	**13,609**	**13,979**	**15,222**	**8%**
SHARE IN HOUSEHOLD FINANCIAL ASSETS (%)													
Total deposits	23.8%	23.8%	23.6%	24.1%	25.2%	23.8%	23.3%	23.1%	22.6%	21.1%	20.7%	18.8%	
Mutual fund assets	1.8%	3.1%	3.5%	3.2%	3.7%	4.3%	5.7%	6.1%	5.9%	6.4%	6.7%	7.8%	
includes money market funds	1.0%	2.3%	2.6%	2.0%	2.3%	2.2%	2.3%	2.5%	2.5%	2.9%	3.1%	3.0%	
Pension fund reserves	14.4%	14.7%	15.8%	16.7%	17.4%	18.5%	19.3%	19.4%	20.0%	20.9%	21.2%	24.4%	
Pension and mutual fund	**16.3%**	**17.8%**	**19.3%**	**19.9%**	**21.2%**	**22.8%**	**25.0%**	**25.5%**	**26.0%**	**27.3%**	**27.9%**	**32.2%**	

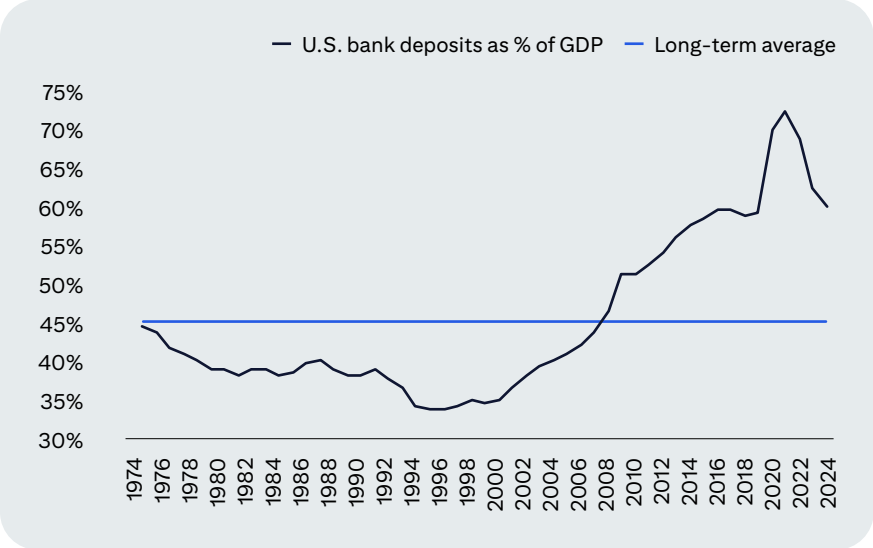
Source: Federal Reserve Board, Citi Institute

[21] Franklin R. Edwards, Financial Markets in Transition – or the Decline of Commercial Banking, 1993.

Looking at growth rates, deposits grew 6% CAGR over 1980-1991, lower than overall growth of total household financial assets as well as GDP (8% CAGR). Meanwhile, MMFs grew 19% CAGR, albeit there is a base effect. If deposits had growth between 1980-91 at the rate of broader financial assets, it could likely have added another $760 billion to the banks' deposit base.

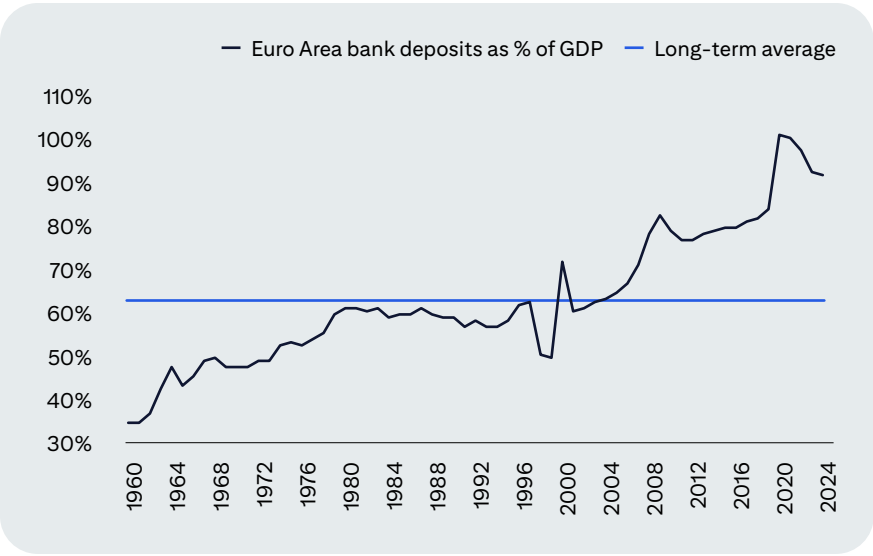
In 1974, U.S. commercial bank deposits were 45% of the U.S. GDP and they reduced 11ppt to 34% in 1994-95, driven by the introduction of MMFs. Albeit this number has since grown to 70% in the 2020s supported by multiple rounds of quantitative easing. EU/UK deposit to GDP ratio ranges between 50-90% from 1970-2025.

Figure 15. U.S. Commercial Bank Deposits as % of U.S. Nominal GDP



Source: Federal Reserve, World Bank, Citi Institute

Figure 16. Euro Area Bank Deposit as % of Nominal GDP



Source: ECB, Citi Institute

Narrow Banking 2.0

The rise of reserve-backed stablecoins introduces the risk of deposit disintermediation, as flows of cash, deposit or securities migrate away from traditional banks into stablecoin structures. The impact varies depending on where the reserves are held (figure 17).

Figure 17. Impact of Stablecoins on Traditional Banking Deposits[22]

BACKING OF RESERVES			
SOURCE OF INFLOW	**HELD IN SEGREGATED ACCOUNTS WITH FULL RESERVE AT CENTRAL BANK**	**HELD AS TRANSACTIONAL DEPOSITS IN COMMERCIAL BANKS**	**HELD IN CASH-EQUIVALENT SECURITIES**
Cash Substitution	**Neutral** Physical cash is tokenized and backed by full reserves at the central bank	**Positive** Physical cash replaced with stablecoins, backed by deposits held at commercial banks, facilitating new credit intermediation	**Positive** Physical cash replaced by securities. Security issuers likely deposit proceeds in banking system or directly use proceeds as credit
Deposit Substitution	**Negative** Commercial bank deposits stored as reserves in central bank, deposit-backed funding for credit intermediation is reduced	**Neutral** Retail deposits replaced with deposit by stablecoin issuer. Net impact neutral if stablecoin deposits treated same as retail deposits	**Neutral/Possibly Negative** Bank deposits converted to stablecoin issuers security holdings. Security seller likely deposits back in bank. Banks partly substitute lost deposits with other debt liabilities, which may contract balance sheet
Securities Substitution	**Neutral** Cash-equivalent securities & money market funds converted into stablecoins. Conversion merely represents a change in depositor and has minimum impact on overall deposits held at commercial banks and thus bank-led credit creation.		

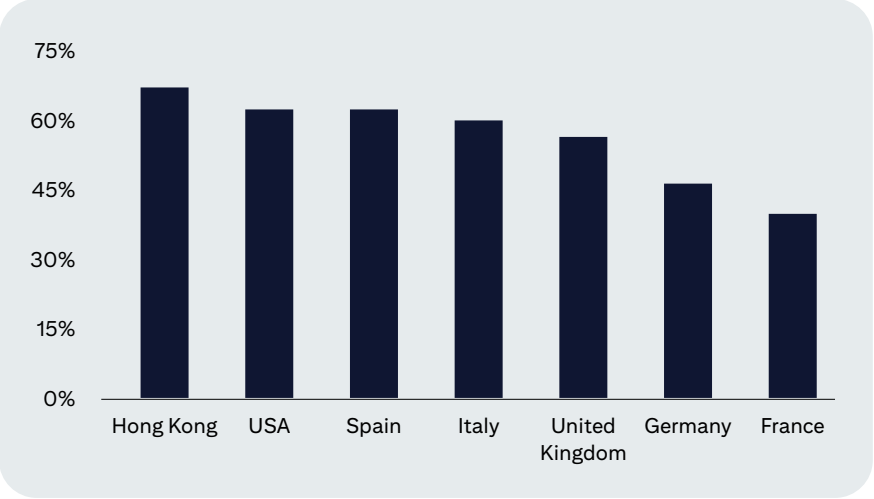
Source: Federal Reserve, Citi Institute

At a system level, stablecoins may resemble "narrow banks",[23] concentrating funds into highly liquid, low-risk assets and reducing banks' ability to extend credit. This could constrain lending and weigh on economic growth, at least during the transition phase, underscoring the importance of where and how reserves are ultimately held.

[22] Board of Governors of the Federal Reserve System, Stablecoins: Growth Potential and Impact on Banking, January 2022.

[23] Narrow banks' – Limit banks to accept deposits and invest only in low risk assets such as government securities to promote financial stability, see Brookings 1987 paper by Robert Litan.

Figure 18. Banking Sector Ratio of Customer Deposits to Total Asset, FY2024



Note: Represents aggregate of deposits and assets for individual banks where data available for FY2024.
Source: SNL Analytics, Citi Institute

Globally, small savings and community banks are likely to be more dependent on public deposits and hence face higher risk of deposit disintermediation as opposed to large banks.

Stablecoins Could Extend Dollar Dominance

Stablecoins may play a role as a Eurodollar 2.0, given demand for U.S. dollars from wholesale and financial transactions in general – and specifically from jurisdictions with volatile currencies.

Hence, we expect the world of stablecoins to remain U.S. dollar-dominated in the coming years. Our base case estimate for 2030 stablecoin supply assumes it will be approximately 90% dollar-denominated, albeit lower than today's almost 100%.

> U.S. dollar-backed stablecoins represent the next wave of innovation in payments, and policymakers should encourage their adoption to advance U.S. dollar dominance in the digital age.
>
> *The White House Digital Asset Report (July 2025)*[24]

[24]The White House, Strengthening American Leadership in Digital Financial Technology, July 2025.

The rise of dollar-based stablecoins may extend dollar supremacy as individuals seek them to preserve their purchasing power from unstable and inflationary economies. It could also help reinforce the U.S. dollar's dominance on the global stage and drive net new demand for dollar risk-free assets inside and outside the U.S.

Stablecoin issuers will have to buy U.S. Treasuries, or comparable low risk assets, against each stablecoin as a measure of having safe underlying collateral. In our base case stablecoin issuance scenario, we expect an additional $1 trillion plus of U.S. Treasury purchases by 2030. Stablecoin issuers could hold more U.S. Treasuries by 2030 than any single jurisdiction today. For reference, the current U.S. T-bill market is estimated at $6 trillion and total U.S. Treasury market at $29 trillion.[25]

However, widespread dollar dominance could potentially have adverse implications for emerging and developing economies with weak and volatile currencies.

- **Currency substitution and loss of monetary sovereignty:** The substitution of traditional currencies for dollar-backed stablecoins reduces demand for local currencies and deepens dollar reliance. As demand for local currency shrinks, central banks may lose effective control over interest rates, inflation targeting, and other monetary tools. Additionally, the convenience and dominance of dollar-backed stablecoins could also undermine local CBDC efforts.
- **Capital flow volatility:** Stablecoins could enable rapid outflows during crises, potentially destabilizing pegs and triggering shocks in FX and funding markets.

  Widespread stablecoin use could create a parallel financial system alongside traditional currencies, which could lead to fragmentation and instability in financial markets. Emerging/ developing markets with illiquid forex markets may see higher exchange rate volatility, as stablecoins provide an easy USD off-ramp.
- **Inflation management and exchange rate pressures:** As dollar-backed stablecoins gain prominence, local prices across emerging and developing markets could become more sensitive to U.S. monetary policy, thereby reducing the central banks' ability to manage domestic inflation. Efforts to defend the local currency against rising dollar-backed stablecoin demand could also strain FX reserves and increase macroeconomic vulnerabilities.

[25]SIFMA, U.S. Treasury Securities Statistics for July 2025.

Beyond the U.S. – Global Push for Stablecoins

On-chain money is reshaping global finance, and while today the stablecoins market remains heavily dominated by U.S. dollar-based coins, other jurisdictions are now accelerating their own initiatives.

The recent passage of stablecoin legislation in the United States has acted as a catalyst, prompting regulators worldwide to reassess their strategies and move toward launching domestic stablecoins.

- Hong Kong introduced its stablecoin licensing framework in August 2025, with the first set of licenses expected in early 2026.[26]
- The UAE is preparing to roll out a dirham-pegged stablecoin, backed by major Abu Dhabi institutions.[27]
- China is considering the launch of yuan-backed stablecoins.[28] Yet some policy observers remain cautious on the short-term likelihood of a yuan-backed stablecoin.[29]
- The UK's Financial Conduct Authority (FCA) unveiled proposals in May 2025 for issuing GBP-backed stablecoins.[30]
- Meanwhile, Japan has already granted a license for fully collateralized yen-backed stablecoin.[31]

Meanwhile in Europe, the European Central Bank (ECB) is pushing ahead with its CBDC (the digital euro project), underscoring the region's preference for a public sector CBDC alternative rather than privately issued stablecoins.[32]

The rationale behind this wave of initiatives is clear. Policymakers and financial institutions see domestic stablecoins as a means to preserve monetary sovereignty, reduce dependence on the U.S. dollar, and ensure that innovation in digital money strengthens rather than bypasses local banking systems. In many cases, they are also a defensive move to avoid being left behind in the global race for financial innovation and digital asset leadership.

Despite this global diversification, the U.S. dollar is likely to remain the dominant unit of account for stablecoins in the foreseeable future. Most global trade, finance, and commodity flows continue to be dollar-denominated, and issuers see the strongest demand for dollar-backed instruments.

Local currency stablecoins and CBDCs are likely to expand, particularly where domestic payments and financial inclusion are priorities, but the gravitational pull of the dollar should ensure that USD stablecoins remain the anchor of the market.

[26] Reuters, First Hong Kong Stablecoin Licences May Be Issued Early Next Year, HKMA Says, 01 August 2025.
[27] Bloomberg, Three Abu Dhabi Giants Plan Stablecoin Backed by UAE's Currency, 28 April 2025.
[28] Reuters, China Considering Yuan-backed Stablecoins to Boost Global Currency Usage, Sources Say, 21 August 2025.
[29] South China Morning Post, Former China Central Bank Governor Urges Caution Amid Stablecoin Frenzy, 28 August 2025.
[30] Financial Conduct Authority (FCA) Press Releases, FCA Seeks Further Views on Stablecoins and Crypto Custody, 28 May 2025.
[31] Reuters, Japan Startup to Issue First Yen-Pegged Stablecoin, 19 August 2025.
[32] Financial Times, EU Speeds Up Plans for Digital Euro after U.S. Stablecoin Law, 22 August 2025.

Challenges to Overcome for Wider Adoption

Several challenges must be addressed for wider institutional adoption. Robustness, security and rigorous stress testing of the underlying technology are essential, particularly for institutional-scale use.

- **Fragmentation and interoperability:** As the on-chin money ecosystem grows increasingly fragmented, seamless interaction across different formats and blockchain networks will be crucial for wider adoption. Liquidity providers, swap pools, and P2P markets are likely to play a vital role in enabling this interoperability. Expanding use cases beyond simple cross-border transfers will also be vital to building a resilient and scalable liquidity ecosystem.

> Stablecoins will only move to mainstream use when they can interoperate seamlessly with existing financial instruments and systems. Otherwise, they risk becoming like loyalty points – valuable in silos but never truly universal.
>
> *Biswarup Chatterjee, Global Head Partnerships & Innovation, Citi Services*

- **Privacy and obfuscation:** Especially relevant for public blockchains, the need to balance transaction transparency with privacy protection remains a significant concern for institutional participants. However, new privacy-preserving solutions are emerging and being tested for different use cases.

> Transparency and auditability of stablecoin reserves are likely to gain focus as institutional adoption grows. Solutions for attesting to the backing of reserves can be delivered on-chain in real-time, offering a level of visibility far beyond traditional balance sheets.
>
> *Ash Morgan, Head of RWA and Stablecoins, Ethereum Foundation*

- **Scalability, liquidity and trust:** For large-value transactions, particularly in capital markets, current scalability and liquidity of stablecoins may be insufficient, making corporates hesitant to use stablecoins for large-value transactions. In addition, trust in stablecoin issuers, particularly private, non-bank entities, also poses a concern, leading many corporates to prefer banks and regulated financial intermediaries for high-value settlements.

> You cannot have innovation without having a safety-first approach. It's not a trade-off, it goes together.
>
> *Caroline Pham, Acting Chairman, CFTC*

- **Accounting treatment:** One of the breakthrough catalysts would be accounting recognition as cash equivalents under IAS7. Without this, stablecoins remain financial instruments (IAS32) and are less attractive to corporate treasurers.

  The SEC has updated staff guidance on the accounting treatment of stablecoins to suggest that they can be treated as cash equivalents, contingent on them having guaranteed redemption mechanisms. Unfortunately, redemption mechanisms for all users is often not guaranteed and is often restricted to verified financial accounts, minimum thresholds, and approved jurisdictions.

- **Systems integration and organizational inertia:** Transitioning from batch-based processing to real-time operations demands significant changes to corporate treasury processes, liquidity management and netting arrangements. Integration with existing accounting and ERP systems can also present operational hurdles.

- **Geopolitical considerations:** The rollout of stablecoins and CBDCs carries geopolitical implications, especially regarding the role of the U.S. dollar in global trade and finance. Divergent national strategies risk creating a fragmented global payment landscape.

Addressing Privacy & Anonymity

Privacy has emerged as one of the critical concerns in the evolution of stablecoins and public blockchains.

While transparency is a key virtue of these systems, they also pose a fundamental challenge for individuals and corporates. Most public chains are pseudonymous (i.e., hide the real-world identity of participants using alphanumeric addresses), but transaction details (e.g., amount, timing, counterparties address) are visible on-chain.

For corporates, the visibility of transactions on-chain can expose sensitive data such as transaction pricing, supplier terms, payroll etc. This could not only undermine competitiveness but also conflict with confidentiality obligations. Regulators too are increasingly focused on privacy, ensuring customer Personally Identifiable Information (PII) is not inadvertently revealed.

Even at a user level, trust in financial systems often depends on the assurance that one's balances and activity are not subject to public scrutiny.

These limitations have led individuals and corporates to private blockchains, especially for financial transactions. Private blockchains offer greater control over data disclosure, but this often comes at the cost of openness and interoperability.

> Privacy remains one of the biggest hurdles for institutional adoption of public blockchains. But powerful solutions are emerging – ZK proofs, trusted execution environments, fully homomorphic encryption and privacy-focused L2s. These technologies can shield sensitive data while still enabling financial institutions to meet compliance requirements.
>
> *David Walsh, Enterprise Lead, Ethereum Foundation*

A growing ecosystem of solutions is now emerging to address these challenges while preserving the benefits of public chains. Zero Knowledge Proofs (ZKPs) are amongst the most prominent.

Shielded pools using protocols like ZCash also enable transactions that occur within pools of encrypted funds such that information like wallet addresses, amounts, and transaction history is untraceable.

Other approaches may include hybrid and permissioned layers that allow private data to be selectively disclosed for audits or compliance, while remaining hidden from the broader public.

Biser Dimitrov
Digital Assets – Technology, Citi

Solving for Privacy on Public Chains

A promising approach to preserving privacy on public blockchains lies in zero-knowledge proofs (ZKPs), which allows for transaction validation without revealing the underlying data. For enterprise use cases, ZKPs can create a privacy-preserving validation layer between counterparties while maintaining the integrity of the consensus mechanism.

By embedding privacy directly into a protocol's virtual machine, rather than applying it as an afterthought, organisations can achieve foundational, rather than patchwork solutions. This ensures consensus rules can verify transactions, while details are encrypted.

However, the technology must mature significantly before widescale deployment. Current solutions require rigorous stress testing to ensure they meet enterprise reliability standards, scale and regulatory expectations. Privacy frameworks must be verifiable, enabling regulators to confirm specific transactions without compromising user confidentiality. Furthermore, integration into the broader financial ecosystem demands interoperability and compliance capabilities from the outset.

With pilots underway involving financial institutions, the prospect of large-scale enterprise adoption of public blockchains with built-in privacy is moving closer – potentially in the next two to three years.

Appendix

Figure 19 highlights the very different velocity profiles across asset classes. Stablecoins typically circulate more frequently than traditional equities or fiat (using Fedwire transactions), likely underscoring their role as high-turnover instruments designed for settlement rather than long-term holding.

USDT has shown consistent velocity in the 50-70x range, whilst USDC has see significant spike up in 2024 and 2025 (especially 1Q2025). By contrast, Bitcoin's velocity has swung more dramatically, likely tied to its speculative nature; while Ethereum has remained in the low double digital.

Figure 19. Comparing Transaction Volume Velocity Across Different Asset Classes

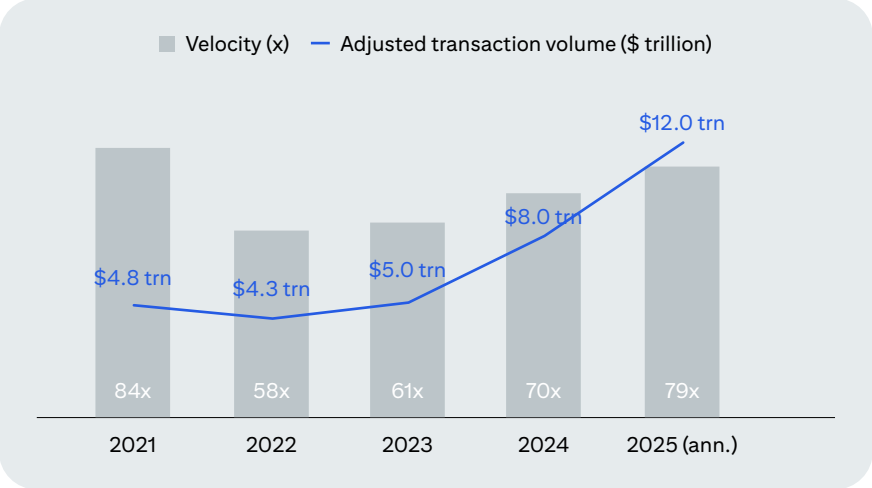
	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25
USDT [2,3]	52	68	52	62	63	61	59	60	70	64	64	79	74	79
USDC [2,3]	45	62	59	80	96	59	57	104	272	389	155	345	268	196
Bitcoin (BTC) [2,4]	263	338	178	83	65	70	62	96	160	136	145	254	197	205
> Bitcoin price ($)	41,299	32,492	21,249	18,060	22,875	28,038	28,086	36,297	53,579	65,687	61,054	83,432	93,381	98,679
Ethereum (ETH) [2,4]	19.0	16.9	10.9	8.0	8.6	9.6	6.9	10.3	17.5	15.5	14.4	21.7	19.2	16.0
> Ethereum price ($)	2,936	2,222	1,515	1,300	1,588	1,861	1,758	1,970	2,920	3,373	2,798	3,092	2,670	2,194
USD Fiat [5]	48	49	50	50	53	52	52	53	53	54	54	53	53	55
NASDAQ [6]	142%	139%	108%	113%	113%	100%	94%	98%	100%	97%	88%	86%	96%	109%

Note: [1] Velocity defined as ratio of aggregate transaction volume to outstanding coins in circulation, where coins in circulation is calculated as market cap divided by price. [2] Adjusted data removes self-churn, internal transfers, and other non-economic activity. Applicable for stablecoins and cryptocurrencies. [3] For stablecoins (USDT, USDC) we use adjusted on-chain transaction volumes data sourced from Artemis. This strips out a lot of noisy exchange wallet reshuffles. [4] For cryptocurrencies (BTC, ETH) we use Coinmetrics adjusted transfer values and supply data. This removes non-economic transactions like churn, contract-level self transfers, and represents meaningful economic activity. [5] For USD Fiat, we calculate this using Fedwire transaction volumes divided by money supply (M2). [6] For NASDAQ, this corresponds to value of electronic order book domestic shares traded divided by their market capitalization for the period.
Source: Artemis Analytics, The Federal Reserve, Coingecko, Coinmetrics, World Federation of Exchanges, Citi Institute

Figure 20 and figure 21 shows both USDT and USDC have grown strongly in absolute transaction volumes since 2021, whist their velocity dynamics diverge.

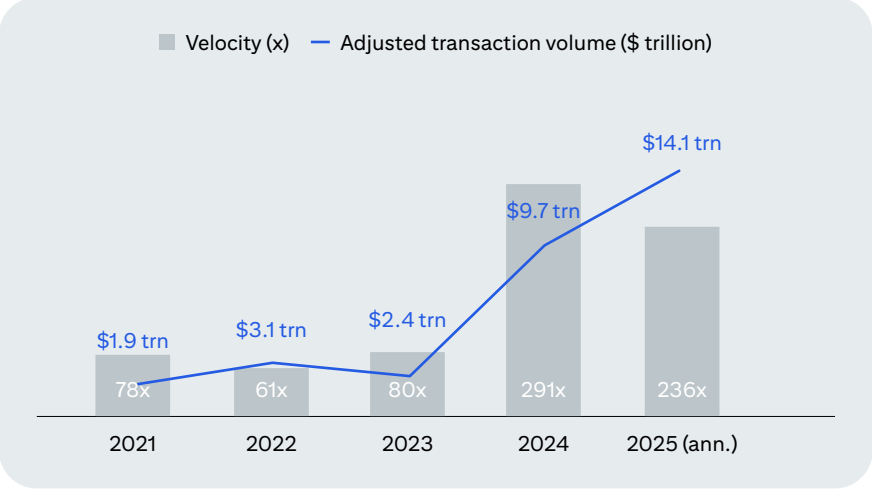
USDT's velocity has remained relatively stable. By contrast, USDC's velocity spiked sharply in 2024 and remains elevated. This partly reflects that USDC transaction activity expanding more quickly as it gains traction in DeFi protocols, institutional payment trials, and through broader multi-chain issuance.

Figure 20. USDT Adjusted Transaction Volume and Velocity



Note: Velocity defined as ratio of aggregate transaction volume to outstanding coins in circulation, where coins in circulation calculated as market cap divided by price. We use adjusted on-chain transaction volumes data sourced from Artemis Analytics.
Source: Artemis Analytics, Coingecko, Citi Institute

Figure 21. USDC Adjusted Transaction Volume and Velocity



Note: Velocity defined as ratio of aggregate transaction volume to outstanding coins in circulation, where coins in circulation calculated as market cap divided by price. We use adjusted on-chain transaction volumes data sourced from Artemis Analytics.
Source: Artemis Analytics, Coingecko, Citi Institute

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Figure 22. Comparison of Regulatory Frameworks for Stablecoins Issuance Across Select Markets[33]

	HONG KONG	SINGAPORE	UNITED STATES	EUROPE	UNITED ARAB EMIRATES
Regulatory Authority	Hong Kong Monetary Authority (HKMA)	Monetary Authority of Singapore (MAS)	Federal Reserve, OCC, and state regulators under the GENIUS Act	European Banking Authority (EBA), European Securities and Markets Authority (ESMA), and National Competent Authorities (NCA)	Central Bank of the UAE regulates Payment Token Service (PTSR) (mainland), VARA (Dubai), FSRA (Abu Dhabi)
Legislation Status	Stablecoins Bill passed in May 2025; in effect from August 2025	Regulatory framework issued in August 2023	Genius Act passed by Senate in June 2025, by the House in July 2025, and signed into law by Trump on July 18, 2025	Markets in Crypto-Asset (MiCA) regulation implemented in phases. Stablecoin rules applicable from June 2024. Crypto-asset service providers (CASPs) applicable from December 2024	CBUAE PTSR August 2024 and in force; VARA (2023) FSRA (2024)
Regulatory Framework	Mandatory, comprehensive licensing regime	Opt-in for MAS regulated SCS; otherwise treated as Digital Payment Tokens (DPTs)	Three-pathway system, where issuers with total market cap not more than $10 billion may opt for state-level regulatory regime	Licensing regimes. E-Money Tokens (EMTs) can be issued by credit institution or electronic money institution Asset-Referenced Tokens (ARTs) require authorization from their NCA	Licensing regime, capital and reserve rules
Scope of Regulation	Non-interest-bearing fiat-referenced stablecoins (FRS) pegged to one or more referenced currencies	Single currency stablecoins (SCS) pegged to SGD or G10 currencies issued in Singapore	Payment stablecoins defined by use and stable value	MiCA's scope extend to ARTs, EMTS, and other crypto assets including most utility tokens	CBUAE: Fiat-referenced virtual asset only. VARA/ FSRA: set specific obligations for reserves, redemption, audits, capital
Interest Payment	Non-interest bearing	No mandate on interest payment	Non-interest bearing	Non-interest bearing or other similar forms of remuneration to stablecoin holders	Non-interest bearing

[33] Citi Research, Hong Kong Multi-Asset, Stablecoins: Assessing FX & Rates Impact, Deciphering Value Chain, 31 July 2025.

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	HONG KONG	SINGAPORE	UNITED STATES	EUROPE	UNITED ARAB EMIRATES
Limitations of Activities	The issue must be prudent and sound in terms of purpose, business model and operational arrangement; issuance upon valid request only to the licensee's customers	Prohibited risky activities including investing and extending loans to other companies, lending or staking of SCS and other DPTs, and trading of DPTs	The issuer can only issue and redeem payment stablecoins, manage related reserves, provide custodial or safekeeping services, and other functions that directly support the issuing and redeeming stablecoins	Prohibition on interest payments. Algorithmic stablecoin ban. Segregation and limits on reserve use	Require to be redeemable at par. Algorithmic and privacy tokens are banned
Disclosure And Reporting Requirements	At least annually audited report, including the audit of reserve assets; quarterly stress tests	Monthly audited report on reserve assets	Monthly audited report on reserve assets	Issuers must create/ publish a white paper before offering a crypto asset to public. Must publish details on reserve of assets with mandatory monthly independent verification	Monthly independent audits of reserve composition
Reserve Requirements	Full backing, i.e., at least equivalent to par	Full backing, i.e., at least equivalent to par	Full backing, i.e., at least equivalent to par	Full backing. At least 30% of funds held as deposits, rest in high quality liquid assets	Full backing on 1:1 basis
Capital Requirements	Minimum paid-up share capital of HK$25 million	SGD 1 million or 6 months operating expenses of the issuer	Capital requirements applicable to permitted issuers, which may not exceed what is sufficient to ensure ongoing operations	Highest of EUR350,000, or as percent of reserve assets, or percent of year's fixed overhead	**PTSR:** AED15 million + 0.5% of face value of outstanding tokens **VARA:** AED1.5 million + 2% of circulating supply **FSRA:** $2 million or issuers annual audited expenditure
AML Requirements	Subject to Guidelines on AML and Counter-Financing of Terrorism (for licensed stablecoin issuers)	Subject to ML/ TF requirements applicable to all regulated payment service providers and banks	Subject to the Bank Secrecy Act	EU AML/CFT rules and the EU Travel Rule	AML/CFT obligations consistent with UAE federal laws

*Virtual Assets Regulatory Authority (VARA); Financial Services Regulatory Authority (FSRA); Central Bank of UAE (CBUAE).
Source: Citi Research, MAS, HKMA, U.S. Government Publishing Office, EBA, CBUAE, VARA, FSRA, Citi Institute

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