

THE EVOLUTION OF DEFI: BANKS, RISK, STABLECOINS AND TRUST

Benjamin Franklin and Treasury
Secretary William P. McAdoo -
the OGs of DeFi



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DeFi vs. TradFi: A Question of Trust?

The concept of decentralized finance - or DeFi, as the tech bros would have it - captures much of the zeitgeist and exuberance reflected in sky-high valuations and optimistic growth forecasts across the global fintech sector currently.

However, this term, in common usage since about 2018 as the focus on blockchain and smart contracts grew, and supercharged since the summer of 2020, is, in reality, not new. Decades before oracles, smart contracts, sequencers, and bridges dominated the nuts and bolts of transactions, the DeFi concept was embodied in a simpler medium.

THE U.S. \$100 BILL, “THE BENJAMIN” – THE ORIGINAL DEFI PAYMENT INSTRUMENT



1862–1929

Large “horse blanket” notes featured ornate designs and various allegorical and historical figures.

1929 Series

The modern small-size format was introduced with Franklin's portrait standardized.



1996 Series

The first major modern redesign added a larger portrait, microprinting, and color-shifting ink.



2013 Series (Current)

Modern design with 3D Security Ribbon, Bell in the Inkwell, and color-shifting accents.

All U.S. currency remains legal tender, regardless of when it was issued.

Source: [\\$100 Note, Issued 1914 to 1990, 2025](http://www.uscurrency.gov)

We'll come back to the good-old \$100 bill shortly.

To be clear, this paper isn't anti-stablecoin or DeFi – not at all – there are of course legitimate use cases. However, this paper does highlight misconceptions about the origins of DeFi and suggests market noise has drowned out gaps and risks in technology, process inefficiencies, financial safety and legal clarity when things go wrong, as well as exposes what's needed for a truly trust-minimized system to work in practice. It also looks to weight stablecoins' advantages against choke points in today's stablecoin workflows where trust, verification, and accountability are most heavily concentrated.

As an additional angle, the paper will briefly touch on technology known as a Global Single Shared Platform. This is a novel counterparty risk, multi-jurisdictional compliance, and global multi-currency ledgering and settlement technology directly accessed and shared across banks that isn't compromised by the very real issues with stablecoins. A deep dive into this area will be the topic of a later paper.

Our intention here is to apply a practical “trust test” to a stablecoin transaction as it exists today, end-to-end, including the on-chain mechanisms and the off-chain dependencies that are required to make real-world payments work. Where the workflow meets a reliability and verification threshold, we should acknowledge it. Where it doesn't, we should be equally explicit, because those gaps define the true risk surface.

Stablecoins can remove friction in specific steps, especially when value stays on-chain or moves between digital venues. Beyond the usual issuer, counterparty and liquidity concerns, **true settlement finality** is a glaring problem. **Wrapped assets**, critical attack points on **bridges**, and **sequencers** and upgradeable **proxies** introduce additional risks. The true **cost of the off-ramping** process (FX, speed, and fees) is an area worthy of its own paper, and numerous known unknowns that lurk in the **intersection between the on- and off-chain worlds** (collateral validation, data accuracy, and verification) add to many intriguing questions that need to be answered.

A Trustless System? More Questions than Answers

So, in a similar vein to the many nagging concerns about unintended consequences from Artificial Intelligence's growing role in society, caution is prudent, and some hard questions must be asked when considering the new world of tokenization and stablecoins.

THE FUTURE IS NOW

Throughout history, finance has mostly operated through centralised systems that are controlled by authoritative entities such as central banks; these systems are based on trust and authority. We refer to them as traditional finance, or TradFi. By contrast, decentralized finance (DeFi) uses blockchain technology to create a trustless system, based on transparency, efficiency and accessibility.

Source: *Standard Chartered, DeFi 101, 2025*

Standard Chartered - a truly innovative bank tracing its roots back more than 170 years but with its finger firmly on the pulse of many of the world's fastest growing populations and economies - publishes research and forecasts for growth in the stablecoin and digital asset markets that are among the most widely cited and most bullish, globally.

And it is here, in its October 2025 piece "DeFi 101", that the bank's characterization of the old school vs. new school battle in financial markets - TradFi vs. DeFi - begs perhaps the most important question: is the assertion that DeFi can and will create a trustless system fair and accurate?

Let's assume that tokenization will be one of the key pillars upon which the next generation of financial services will be successfully built. Stablecoins are effectively tokenized cash backed by real assets (we hope!) – and will undoubtedly play a pivotal role within this, and as the buzz surrounding stablecoins reaches fever pitch in 2026, it's worth stepping back for a moment, a pause for breath if you will.

This pause matters because the question is not whether stablecoins are innovative, but how they behave when used by banks to move money globally while also addressing weighty money laundering, compliance obligations, and off-chain settlement frameworks. And ultimately, banks can't ignore new and heightened reputational risks, fines, penalties, and sanctions, as well as possible jail time in some jurisdictions.

The Original DeFi

If we strip DeFi down to its stated ambition, the benchmark is simple: value can move without friction, without intermediaries, and with immediate settlement finality. Long before blockchains, one instrument did that remarkably well: physical cash.

The U.S. \$100 bill dates back to 1862, and from 1869 to 1914 and Abraham Lincoln was featured on this note. In 1914, Secretary of the Treasury William P. McAdoo moved to commemorate Benjamin Franklin for his notable discoveries, contributions to science and his statesmanship in the founding and support of the new United States of America. As the "wise old man" among the Founding Fathers, Franklin provided much of the intellectual firepower during a turbulent time in U.S. history.

The \$100 bill, colloquially referred to as “the Benjamin”, has long met the threshold for the qualities needed to pass a decentralized test. A U.S. \$100 bill is a bearer instrument. It can be transferred peer-to-peer, it settles instantly, and the recipient doesn’t need an account, a bank relationship, or a message format to receive it. As a “decentralized” user experience, it’s hard to beat.

Let’s call it like it is, Treasury Secretary William McAdoo and Benjamin Franklin are the OGs of DeFi.

SHARES OF U.S. CURRENCY ABROAD

Percent of all U.S. currency



Source: *Federal Reserve Bank of Chicago, Understanding the Demand for Currency at Home and Abroad, 2018*

Other qualities that pass the DeFi test are its wide acceptance - global in fact - and that it scales entirely on trust in the issuer, the U.S. Federal Reserve. Also, with about three-quarters of a near \$2 trillion worth of U.S. \$100 bills in circulation today reckoned to be outside of the U.S., and a shelf life per bill of more than 20 years (Chicago Fed), the original DeFi unit is remarkable and unique when measured by its success, efficiency, and ubiquity.

Why Trust Matters...

Amid all the stablecoin euphoria, it’s important to remember that some fundamental pre-requisites in the financial services and payments worlds will never change. The most important of these can be summed up in one word.

Trust.

Trust is central to any functioning financial system. While new software, products, and technologies promise DeFi efficiency and scale, the question is: has trust actually improved, weakened, or perhaps shifted? The Holy Grail of operating and growing a successful financial services business requires one to establish AND maintain trust over time.

The consequences of a loss of trust can be devastating, costly, and swift to both consumers and businesses, as well as investors and financial institutions. Think:

 \$6 Billion London Whale Loss, 2012	 \$9 Billion Fine for Sanctions Breaches, 2014	 c 850.000 Bitcoins Lost, 2014
 Complete Collapse 2023	 €1,9 Billion Missing Balance Sheet Cash, 2020	 FTX Collapse 2022

While each event was triggered by different reasons – lack of transparency, malfeasance, lax controls or capabilities, questionable judgment or business practices – ultimately, a breakdown in trust occurred. Some were highly regulated with layers of internal and external supervision, yet trust was still compromised.

Stablecoins - Only as Strong as the Weakest Link...

Stablecoins are the focus of this piece given their meteoric rise and their status as a middle-ground between the on-chain world of cryptocurrencies and the asset-backed (usually) world of traditional finance.

Examining the intersections and chokepoints of DeFi (stablecoins) with traditional payment systems, we expose where trust can be assayed and risk introduced. This is a key first step to understanding where the trustless hurdles exist.

Rather than treating these as isolated weaknesses, it's useful to map where trust concentrates across the stablecoin transaction lifecycle.

TRUST CONCENTRATION MAP IN STABLECOIN WORKFLOWS

On-chain trust dependencies (Trust concentrated within blockchain execution)	Off-chain trust dependencies (Trust concentrated outside the blockchain)
<ul style="list-style-type: none"> ● Smart contract integrity: Reliance on correct, vulnerability-free code for issuance, transfer, and conditional logic. ● Governance mechanisms and admin keys: Upgradeability, pause functions, and privileged controls that allow rules to change after deployment. ● Sequencer control and MEV: Transaction ordering and execution timing can be influenced, affecting determinism and fairness. 	<ul style="list-style-type: none"> ● Reserve assets and custodial arrangements: Dependence on off-chain assets being held, safeguarded, and managed as represented. ● Oracle data accuracy and update integrity: External data feeds that inform pricing, collateral valuation, and trigger conditions. ● Compliance enforcement and discretionary controls: KYC/AML processes, sanctions screening, and the ability to freeze or restrict assets. ● Redemption mechanics and off-ramp execution: Conversion back into fiat currency, including FX pricing, settlement timing, and legal enforceability.

In terms of cross-border payments, it's notable that the highest-impact risks are rarely the token transfer itself. They sit in the off-chain verification, redemption, compliance, and enforceability that surround it.

A Head-to-Head Comparison

With this distinction in mind, the table below pits stablecoins alongside traditional payment instruments and modern payment infrastructure (A Global Single Shared Platform or GSSP) across the dimensions that matter most in cross-border payments.

And for clarity, the Global Single Shared Platform is bank software that powers new infrastructure that's indifferent to whether the payment is fiat or stablecoins, and funds are moved instantly through individual bank ledgers, in different currencies, across a single, shared, permissioned bank technology platform. In addition to supporting fiat and stablecoins alike, the GSSP digitizes and executes individual rules for each bank associated with counterparty risk, local and multi-jurisdictional compliance, including notably data protection and consent-managed data sharing, transaction risk, funding certainty, payment routing, currency conversion, and settlement – all in real time across bank and non-bank financial institutions. Moreover, see-through to each institution's risk and compliance rules, how they were executed, the results of and/or orchestration of various 3rd party checks and supporting data, documents and artifacts are perpetually shared and viewable.

This new bank technology enables unprecedented and unrivalled safety, transparency, speed, and cost benefits in a manner that's well documented, understood, consistent with prevailing practices and therefore familiar to regulators and central banks. Built on the same single-shared-ledger construct used by central banks for net settlement between banks, this example has been materially enhanced to address cross-border, multi-currency payments, enabling all parties to operate from one source of truth with verifiable, regulator-grade controls and authenticated data.

While not the subject of this paper, it's necessary to simply compare the historical way funds have moved globally vs. stablecoins vs. a Global Single Shared Platform to avoid an incomplete picture.

Illustrative comparison of assets, instruments, and infrastructure. Stablecoins are tokenized assets; outcomes depend on the surrounding payment, compliance, and settlement infrastructure.

Dimension	Traditional Payments (Domestic & Cross-Border Instruments)	Stablecoins (Tokenized Assets)	Global Single Shared Platform
What It Is	<ul style="list-style-type: none"> Bank-based payment instruments operating over correspondent networks and domestic RTP systems 	<ul style="list-style-type: none"> Digital bearer assets representing tokenized value 	<ul style="list-style-type: none"> Software infrastructure built on a single, shared, permissioned ledger that digitizes and executes compliance, funding, routing, and settlement rules across fiat and stablecoins
Speed	<ul style="list-style-type: none"> Domestic RTP can be near real time Cross-border payments often take 1–3 days due to intermediaries, cut-off times, batch processing, and reconciliation 	<ul style="list-style-type: none"> Near-instant value transfer on-chain Speed depends on minting, bridging, and off-ramping steps 	<ul style="list-style-type: none"> Real-time transactions across bank ledgers globally Real-time or near-real-time, 24x7, execution across domestic RTP and cross-border corridors Eliminates manual handoffs and batch-based delays regardless of instrument
Cost	<ul style="list-style-type: none"> Domestic transfers low cost Cross-border fees include FX spreads, correspondent fees, lifting fees 	<ul style="list-style-type: none"> On-chain transactions can be low cost Total cost increases with bridges, custody, FX, and off-ramping 	<ul style="list-style-type: none"> Simply no lower cost way to safely and in full compliance, move money globally by digitizing previously manual risk, compliance and payment orchestration workflows across multiple financial institutions
Automation	<ul style="list-style-type: none"> Automation limited to institution-specific and message-level rule sets Cross-party coordination and complex decisions handled manually or post-transaction 	<ul style="list-style-type: none"> Smart contracts enable conditional logic at the asset level Automation breaks when off-chain steps are involved 	<ul style="list-style-type: none"> Pre-transaction automation, rule execution, and intervention occur at the infrastructure layer Supports complex compliance, risk, and routing decisions before funds move

Traceability & Transparency	<ul style="list-style-type: none"> Limited real-time visibility Status often inferred or manually queried across institutions 	<ul style="list-style-type: none"> On-chain transactions are visible Critical data (reserves, identity, compliance) remains off-chain 	<ul style="list-style-type: none"> 100% see-through to every (permissible) data, document and artifact of a sender, recipient and counterparty Perpetual audit with real-time visibility into the risk, compliance and product rules of a counterparty including the result of their checks Full, real-time, end-to-end visibility across counterparties
Compliance & Controls	<ul style="list-style-type: none"> Established regulatory frameworks Heavy manual processes and post-transaction reviews 	<ul style="list-style-type: none"> Compliance enforced through issuers and intermediaries Legal and judicial treatment remains jurisdiction-dependent and evolving 	<ul style="list-style-type: none"> Digitizes existing regulatory, compliance, and legal requirements Enables real-time controls without abandoning fiat frameworks Completely and solely bank controlled, administered and executed
Settlement Finality	<ul style="list-style-type: none"> Finality varies by system and corridor Often delayed or conditional 	<ul style="list-style-type: none"> On-chain finality doesn't equal real-world settlement finality 	<ul style="list-style-type: none"> Ensures true settlement finality across funding, clearing, and payout by coordinating all parties and systems
Scalability & Reliability	<ul style="list-style-type: none"> Proven at scale but operationally inefficient 	<ul style="list-style-type: none"> Scales on-chain, but exposed to bridges, oracles, and governance risk 	<ul style="list-style-type: none"> Scalable across markets, volumes, and regulatory regimes

Where stablecoins can outperform correspondent workflows

In constrained scenarios, particularly where transactions remain within digital environments, stablecoins can outperform traditional correspondent workflows.

- **Faster value movement between digital endpoints:**

When funds remain within digital venues or compatible wallets, transfer can be near-immediate.

- **Programmable handling of funds:**

Conditional release, automated reconciliation triggers, and richer event logs can reduce manual back-office work.

- **Always-on transfer capability:**

Digital assets do not inherently inherit banking cut-off times, which can reduce downtime between steps.

- **Simplified distribution to non-bank endpoints:**

In some corridors, stablecoin-to-wallet pathways can expand reach compared to bank-to-bank only models.

These are genuine advantages. They partially explain why stablecoins have gained traction in trading, treasury, and digital-native use cases.

Where trust reappears in real-world payment workflows

The challenge emerges when stablecoins are asked to operate as mainstream, regulated cross-border payment instruments. At that point, the focus can no longer be limited to the on-chain transfer itself. The risk surface expands to the full transaction lifecycle surrounding it.

This isn't simply a question of converting tokens back into fiat; it's about confidence, controls, and accountability regarding data.

In real-world payment flows, critical data often originates outside the blockchain, frequently from non-bank sources. Identity information, transaction context, compliance attributes, pricing inputs, and triggering conditions are typically introduced via oracles or external interfaces. While the blockchain may execute deterministically on that data, it can't independently verify whether the data is accurate, complete, or valid at the point of entry.

For regulated institutions, this raises fundamental questions:

- **How can a bank rely on data injected into a transaction by a non-bank actor?**
- **What assurances exist that the data hasn't been manipulated, misreported, or compromised?**
- **If the data is wrong, who bears legal responsibility for the resulting outcome?**

These questions aren't simply academic talking points. In regulated payments, liability matters as much as execution. When errors occur, courts and regulators look for clear accountability. In many stablecoin workflows, responsibility is fragmented across issuers, oracle providers, smart contract developers, validators, custodians, and off-chain intermediaries. The result is ambiguity precisely where banks require certainty.

Additional challenges

Data sharing introduces a second structural challenge. Public blockchains are designed for transparency, not selective disclosure. Yet many jurisdictions impose strict requirements around data protection, confidentiality, and access control. Financial institutions are often legally required to restrict who can see specific customer, transaction, or counterparty data. On a public or semi-public chain, that granularity is difficult to achieve. Data is typically visible to all participants or to none, with limited ability to tailor access by jurisdiction, role, or legal entitlement.

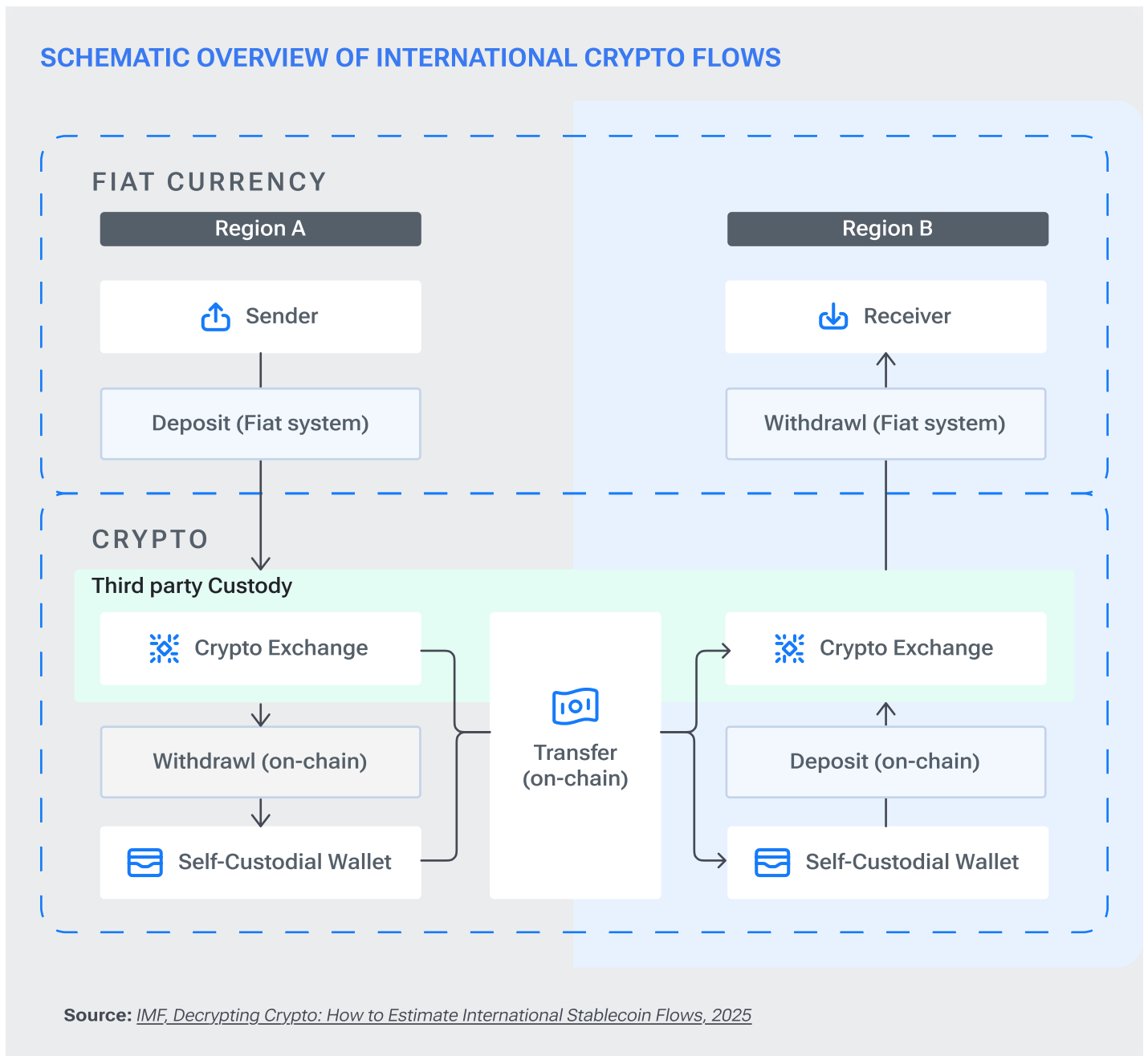
Operational realities further complicate matters. When value must move from an on-chain environment to a domestic payment rail, the process involves manual hand-offs associated with verifications and reconciliation. And regarding the fiat payment, when a transaction requires settlement through a traditional bank system, timing once again becomes dependent on the system's operating model, banking hours, cut-off times, and local holidays rather than the near-instant promise of a stablecoin future. A request initiated late on a Friday may not be processed until the following week, when the bank reopens on Monday morning.

These delays can reintroduce the frictions that stablecoins are lauded for eliminating.

It's clear why on-chain finality doesn't equate to real-world settlement finality. While the token transfer may be instantaneous and deterministic, the surrounding steps involving data validation, compliance checks, funding confirmation, privacy constraints, payment processing and legal enforceability are where trust, cost, delay, and risk tend to concentrate.

Evaluating whether stablecoins can meet the expectations of a resilient, regulated payment system, therefore, requires an in-depth examination of more than just the asset backing the transaction. It requires looking into the full end-to-end workflow in which that transfer is embodied.

The schematic below makes clear that the on-chain transfer is the simplest part of the process. Trust, verification, liability, data integrity, privacy constraints, and real-world timing risks emerge everywhere the transaction relies on off-chain data, custodians, compliance processes, and manual hand-offs to domestic payment rails.



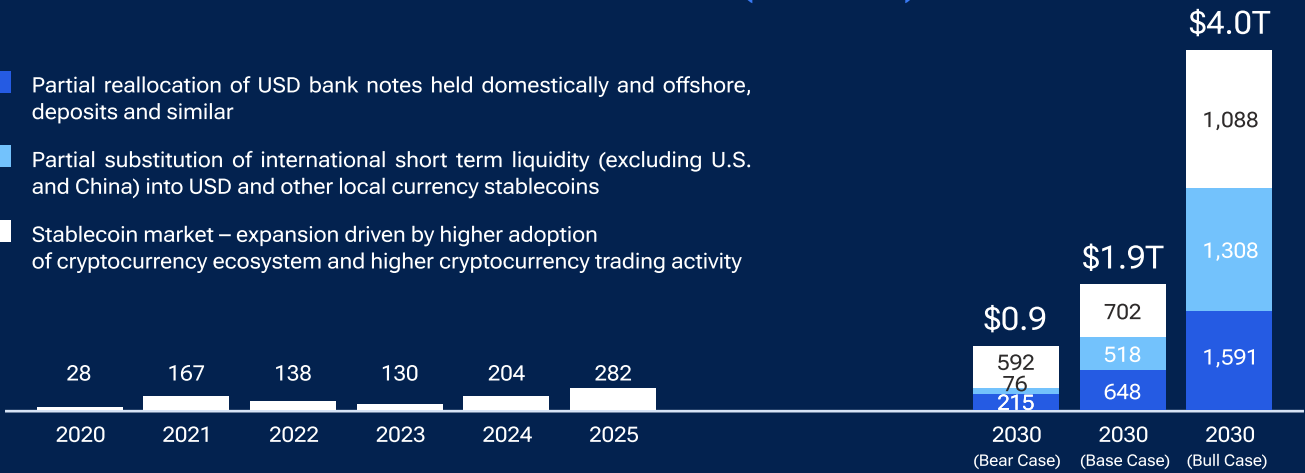
A \$300 Billion Market and a \$300 Trillion Lesson in Controls

Stablecoin supply surpassed \$300 billion in 2025, which is 50% higher than the start of the year and a 150% leap from the start of 2024.

According to Citi's Future of Finance bull case estimate, this could approach \$4 trillion by 2030 - top-end and potentially a fanciful figure, but surprisingly one that pales into insignificance against a \$300 trillion fat finger or technical glitch. A disaster narrowly averted, the following is a salutary reminder of the emerging risks in the DeFi world that need to be managed.

ESTIMATING STABLECOIN MARKET SIZE BY 2030 (\$ BILLION)

- Partial reallocation of USD bank notes held domestically and offshore, deposits and similar
- Partial substitution of international short term liquidity (excluding U.S. and China) into USD and other local currency stablecoins
- Stablecoin market – expansion driven by higher adoption of cryptocurrency ecosystem and higher cryptocurrency trading activity



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

Source: Citi, *Stablecoins 2030: Web3 to Wall Street, 2025*

In October, Paxos - PayPal's blockchain partner - mistakenly minted \$300 trillion worth of the online payment giant's stablecoin instead of the intended \$300 million. Let's park the fact that there aren't enough dollars in global circulation to back this amount.

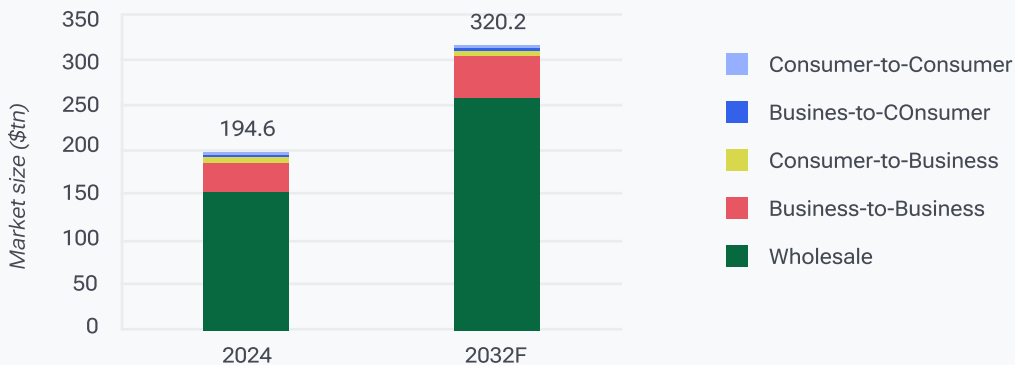
Labeled a "technical error" by the company, the real takeaway is that this 20-minute mistake highlighted that while the dollar peg was guaranteed by Paxos, it clearly wasn't linked to the minting of the stablecoin.

Two predictions are reasonable, arguably certain. One, someone will mint more stablecoins than assets held by their bank partner(s) – whether through technical errors, process breakdowns, the absence of banktech software to prevent this, malfeasance, or some other reason. And two, when a loss occurs (and it will), courts will eventually decide what responsibility a deep-pocket bank has to ensure sufficient funds are held to back stablecoin issuance.

Coincidentally, and to give stablecoin some further context, the \$300 trillion fat finger almost exactly coincides with the expected market size of the global cross-border payments market (IFX) by about 2030.

OVERALL CROSS-BORDER PAYMENTS GLOBAL MARKET SIZE OVER TIME

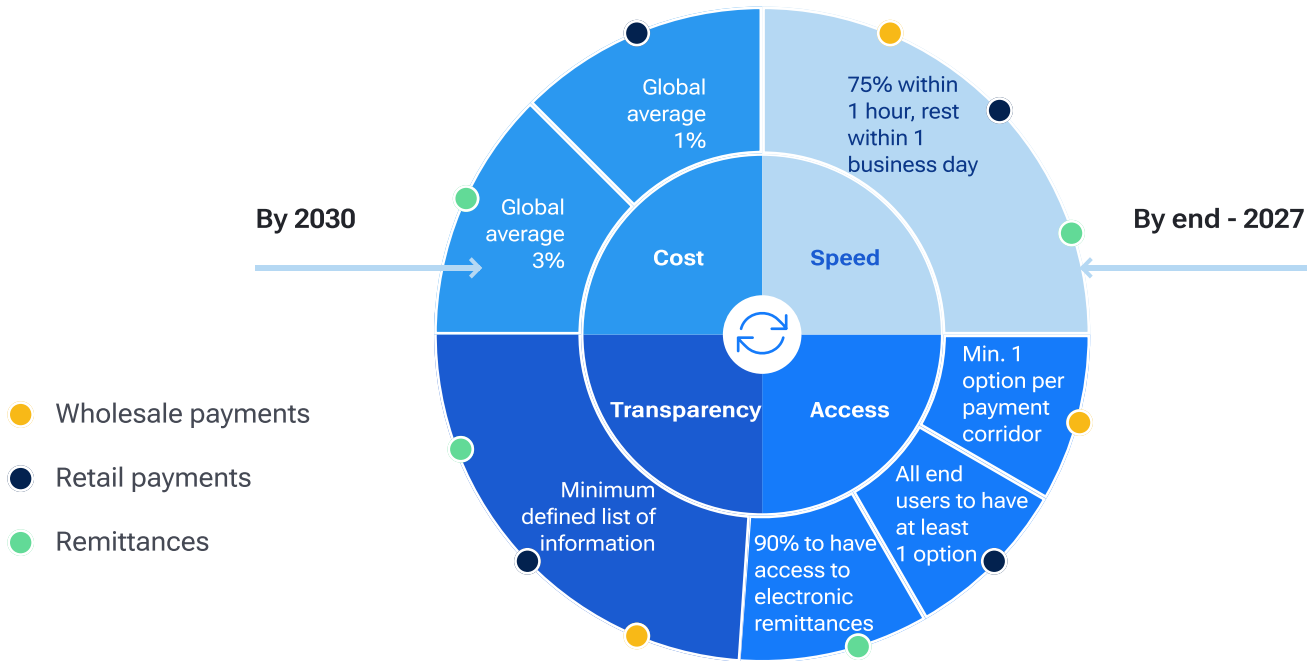
Wholesale and retail cross-border payments market size, 2024 and 2032F



Source: FXC Intelligence, *Cross-border payments market now worth over \$194tn and is forecast to reach \$320tn by 2032, 2025*

Access, namely widespread availability and inclusion, should also be a prerequisite as financial services evolve. As tokenization matures and proven use cases for stablecoins grow, these qualities will no doubt become more important as the divide between winners and losers emerges.

As a brief aside, **Transparency** and **Efficiency** are two other critical attributes for a well-functioning financial services system, and these chime exactly with the G20's goals in its roadmap for enhancing cross-border payments (cost, speed).



Source: *Financial Stability Board, G20 Roadmap for Enhancing Cross-border Payments, 2023*

There is currently a glaring disconnect between expectations of where and how stablecoins can be efficiently and safely utilized and the reality, with the off-ramping step among the most challenging. As a means to an end, notably in payments and cross-border payments, stablecoins are not yet a cheap, safe, and transparent way to transact many forms of business.

As stablecoins scale, the central challenge is not market size but whether issuance, controls, redemption, and accountability can keep pace with the volumes and expectations placed upon them.

Stablecoin Sanity Test

“The primary use case for stablecoins is facilitating on and off-ramping between fiat currencies and cryptoassets within the crypto ecosystem, while also serving as collateral in decentralised finance applications.”

Source: *ESRB, Crypto-assets and decentralised finance, 2025*

As a practical starting point, it's useful to ask a small number of structural questions about where trust resides in a stablecoin transaction, and which actors or mechanisms that trust depends upon. The questions need to be addressed to the stablecoin issuer, the oracle, the smart code, the validators and sequencers, the peg mechanism, and the bridges when more than one chain is involved.

But before we examine these questions in detail, it's useful to map where trust actually concentrates across a stablecoin transaction.

Key Trust Concentration Points in Stablecoin Workflows

Trust Concentration Area	Why Trust Is Required
Off-chain collateral and reserves	Requires confidence that reserve assets exist, are safeguarded, and remain available for redemption as represented.
Oracle data and update mechanisms	Relies on external data sources to provide accurate, timely information that smart contracts cannot independently verify on-chain.
Governance mechanisms and admin controls	Upgradeability, pause functions, or multi-sig governance concentrate decision-making authority outside of automated execution.
Smart contract dependencies	Certain functions rely on external actors such as keepers, liquidators, or validators to execute intended outcomes.
Regulatory and legal intervention	Compliance obligations may require issuers or intermediaries to freeze, restrict, or reverse activity under legal authority.
Transaction ordering and MEV	Execution sequencing can influence outcomes, introducing reliance on validators or sequencers to behave as expected.
Cross-chain bridges and wrapped assets	Moving value across chains introduces reliance on custodial, contractual, or technical mechanisms outside the originating ledger.

These trust concentration areas do not imply that stablecoins are ineffective. They do however highlight where stablecoin transactions remain dependent on a combination of on-chain execution and off-chain governance, controls, and legal enforceability.

To assess whether a stablecoin-enabled payment can meet the expectations of regulated, real-world use, the following questions examine where trust must still be assumed, verified, or enforced in practice.

5 Questions of Trust

These questions don't negate stablecoins' advantages. They identify the dependencies that still determine whether a payment is truly reliable, compliant, and enforceable in the real world.

01 Trust in the Stablecoin Issuer

Do the funds exist? Will the issuer honor redemption? What about counterparty risk and unforeseen regulatory changes?

- Reserves actually exist in the claimed amounts
- Redemptions will be honored promptly
- The issuer maintains adequate risk management
- Regulatory changes won't freeze assets

02 Trust in Oracles

Oracles bridge on-chain smart contracts and off-chain data. A compromised oracle can feed incorrect data, triggering improper liquidations or system failures. The oracle problem remains one of DeFi's most significant trust dependencies.

03 Trust in Smart Contracts and Validators

- Admin Keys: Many contracts allow developers to pause or upgrade
- Code Bugs: Vulnerabilities have led to billions in losses
- Upgradeable Proxies: Rules can change post-deployment
- L2 Sequencers: Often centralized, controlling transaction ordering

04 Trust in Bridges

Bridges connecting blockchains are notoriously vulnerable. Wrapped assets often lack transparency, custodial risk is significant, and bridges have been the target of the largest DeFi hacks, with over \$2 billion stolen in 2022 alone.

05 Trust in KYC/AML Processes

Stablecoins exist at the intersection of programmable money and regulatory oversight. KYC/AML compliance introduces both required consumer protections and new vectors for trust and control. Issuers can freeze addresses, creating an implicit custodial relationship.

Together, these questions illustrate that stablecoin transactions remain dependent on a combination of on-chain execution and off-chain governance, controls, and legal enforceability.

Final Thoughts

The way forward is likely to feel familiar. Transparency, verifiability, and regulatory clarity have always been foundational to trust in financial systems. What's different today is the speed at which new technologies are being introduced, often ahead of the controls, evidence, and accountability required to support them at scale. Recognizing these gaps early shouldn't be seen as pessimism, negativity, or resistance to change. These are essential prerequisites for building systems that can endure by ensuring trust. Any sustainable path forward will require progress across a familiar set of dimensions:



Transparency as Standard

Regular audits, attestations, and verifiable evidence



Regulatory Clarity

Clear, enforceable frameworks that protect users and institutions



Technical Maturity

Improved oracle integrity, bridge security, and operational controls



Risk Acknowledgment

Honest disclosure of trust dependencies and control boundaries



User Education

Clear communication about risks, limitations, and responsibilities

The original DeFi, the humble \$100 bill, succeeded not because it was trustless but because trust in the Federal Reserve was earned through transparency, consistency, and accountability over many decades. Moreover, the United States of America has so far never failed to pay its debts, and those who hold and use Benjamins trust that this will continue. Perhaps the lesson for crypto is not to eliminate trust but to earn it. As stablecoin supply hits \$300 billion and predictions of \$2-4 trillion markets by 2030 proliferate, we stand at a critical juncture.

The question is not whether DeFi can achieve perfect trustlessness. It likely can't. The question is whether the industry can build systems that are transparent enough, secure enough, and reliable enough to earn sufficient trust for legitimate, mainstream use cases over a long period of time.

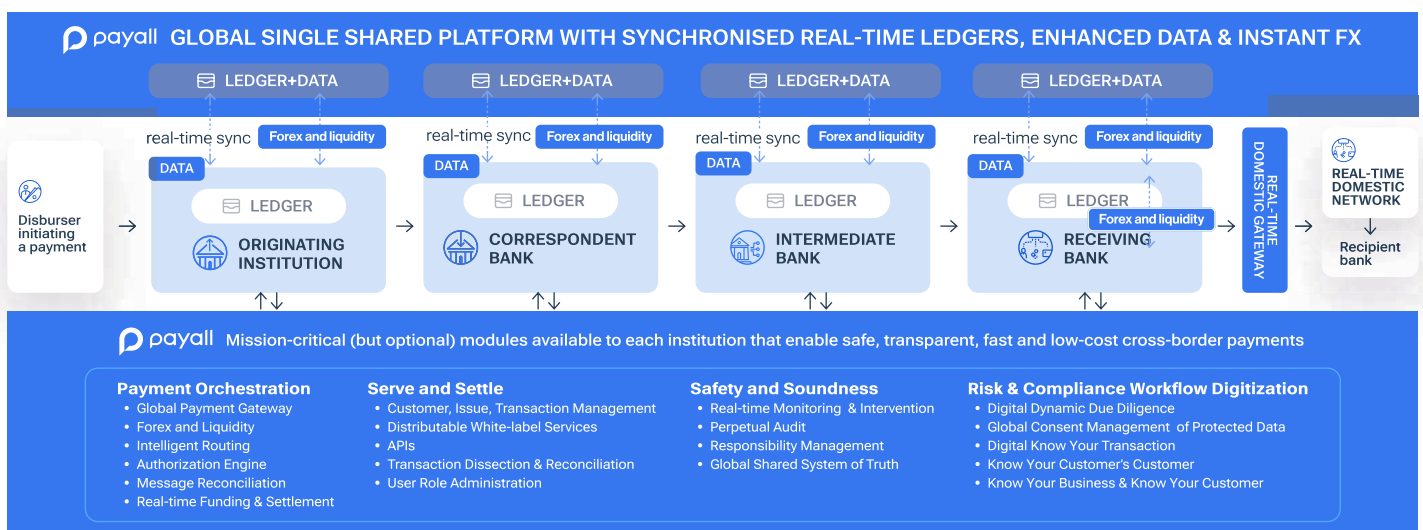
A Note on Regulated Modernization

None of the conclusions in this paper are intended to suggest that the status quo, or the last 50-years of correspondent banking mess to enable cross-border payments, is acceptable. It's not.

They're intended to highlight that beyond stablecoin, new technologies like Payall's specialized Global Single Shared Platform and new paradigms such as Mastercard Move, Visa Direct and others – are rapidly shifting the status quo.

We can't ignore that cross-border payments have been constrained or are "risky and inefficient" because of manual workflows, incomplete information, disconnected bank systems, fragmented data sharing, and after-the-fact audits – all of which introduce cost, delays, and risk. The critical point here is that stablecoins and DeFi don't adequately address these. Further, regulated institutions can modernize without abandoning fiat frameworks, compliance norms, or legal accountability.

Payall re-imagined a familiar and trusted technology used by central banks and banks for decades – the single shared platform – and pioneered an entirely new form of Global Single Shared Platform that digitizes real-time rule execution, data and evidence capture, independent verification and perpetual visibility for historically technically disconnected banks. Moreover, mission critical capabilities have been built for other participants in the cross-border ecosystem - central banks, regulators, FX traders and liquidity providers as well as ultimately directly integrating with real-time domestic payment rails - enabling banks and other regulated entities to move money safely, transparently and efficiently. This is done without regard to whether the payment is fiat or stablecoin. And this approach doesn't rely on assumed trust, nor does it introduce new judicial or regulatory uncertainty.



The practical path forward isn't to pretend trust can be eliminated, or think that stablecoins are a panacea for the multitude of cross-border payment processes and requirements, but to engineer systems where trust is continuously verified through clear controls, verifiable evidence, transparent governance, and enforceable accountability. Stablecoins can become part of that future, but only if their real dependencies are acknowledged and designed around, not marketed away.

Payall Payment Systems

Payall provides enterprise software and infrastructure that enables banks and other financial institutions, as well as regulated entities, to offer safe, transparent, low-cost, immediate, and inclusive cross-border payments.

Payall provides capabilities to central banks, regulators and domestic payment rails to digitize end-to-end work flows for boarding, oversight and audits as well as domestic and cross-border payment orchestration.

Payall has pioneered the first-ever multi-currency Global Single Shared Platform as modular infrastructure that solves different problems facing originating institutions, correspondent banks, and new alternatives to correspondent banks, intermediate banks, central banks, regulators, domestic payment networks, and liquidity providers.

Inspired by first-principles, Payall's breakthrough capabilities digitize end-to-end counterparty risk management, multi-jurisdictional compliance, real-time event surveillance and intervention, dynamic transaction decisioning across multiple institutions and countries, as well as a global gateway that intelligently routes payments to last-mile partners, including domestic bank transfer networks, mobile money operators, digital wallets and cash networks reaching up to 95% of the world's population.

Payall's technology seamlessly integrates with core bank systems and digital bank platforms or operates as "bank-in-a-box" for a complete digital presence. With Payall, banks and other financial institutions can offer cross-border product experiences their customers need, but no bank has ever offered.

Payall is backed by Andreessen Horowitz (a16z), Ventura Capital, Thomson Reuters Ventures, Motivate Ventures, BAT-VC, Presidio Ventures / Sumitomo Corp, PS27 Ventures and other notable family offices and industry icons.

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