

Stablecoin Payments

The **Trillion Dollar** Opportunity

Keyrock

**bitso
business**

 CIRCLE  ripple  First Digital **BVNK**  Gnosis Pay
 MANSA  lumx  Ondo **Conduit**  sphere

Keyrock

Founded in Brussels in 2017, Keyrock is a global crypto investment firm at the forefront of market making, OTC, and options trading for digital assets. Providing liquidity to over 85 centralized and decentralized venues worldwide, their 170-strong team operates across 37 countries, with entities in Belgium, the UK, Switzerland, France, and the U.S. Keyrock's commitment to the industry is practical, not theoretical. They offer in-depth industry insights, co-create DeFi ecosystems, and actively support Web3 startups.

With Keyrock, the future of digital assets is not just envisioned; it's actively being built.

Bitso

Bitso is the leading financial services company powered by crypto in Latin America, with a community of over 9 million customers. Bitso offers a secure, regulated, and easy-to-use digital platform to buy, sell, store, earn yields, and conduct transactions with more than 100 cryptocurrencies.

Bitso Business is the B2B segment of the company, serving more than 1,900 institutional clients. Bitso Business provides infrastructure for cross-border payments, enabling global companies to pay and receive payments instantly in local currency and move money across borders efficiently and transparently.

Founded in 2014, with more than 500 employees in 35 different countries, Bitso works to make crypto useful, unlocking the power of secure, borderless, and easy-to-use financial products. Bitso remains committed to empowering the region by providing universal access to the digital economy of the future and enabling a fairer monetary system.

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Table of Contents

1. Introduction: The Infrastructure Divide	3
1.1 History, A Legacy of Rails	7
2. The Global Money Machine	10
2.1 The Old Rails Beneath Us, SWIFT.....	11
2.2 The Cost of Being Fast, Prefunding	13
2.3 Netting, The Quiet Engine of Interbank Systems	16
3. Stablecoins 101.....	18
3.1 The Rise of Stablecoins.....	19
3.2 Value in Motion.....	21
3.3 The Revenue Behind the Peg	22
4. Building the Stablecoin Payment Stack	26
4.1 The Bridge to Virtual Accounts	27
4.2 Owning the Stablecoin Stack.....	30
5. Bridging the Legacy Stack	33
5.1 The Bridge between Fragmented Rails	34
5.2 Working Capital at the Speed of Settlement	37
5.3 The Clearinghouse that Never Sleeps.....	41
6. Proof in the Payments	42
6.1 The Treasury Turnaround, B2B.....	46
6.2 Money that Finds a Way, P2P.....	52
6.3 Stablecoin-Linked Cards.....	57
6.4 Rewiring FX.....	63
7. Emerging Opportunities.....	70
7.1 The Rules of the Rail	71
7.2 The Last Mile	75
7.3 Scaling Liquidity.....	77
7.4 Money Becomes Software	80
8. Conclusion	84

Foreword

Payments are undergoing a fundamental transformation. For decades, cross-border transactions have been shaped by legacy infrastructure that disproportionately burdens emerging markets. Stablecoins change that equation.

Like email over the internet, stablecoins connect everyone to the same shared network. Their universality represents a new financial operating system. One that collapses intermediaries, improves capital efficiency, and brings programmable money to the global stage.

At Keyrock and Bitso, we see this shift firsthand. From enabling real-time remittances in Latin America to powering institutional stablecoin flows across exchanges and OTC venues, stablecoins are unlocking financial access and offering an internet-native alternative to SWIFT, prefunding, and netting. Individuals are sending money in seconds, not days. Treasury management is being rebuilt from the ground up. And institutions are embedding stablecoin infrastructure into their core operations.

This report provides an in-depth look at stablecoins as payment rails. From legacy systems to the infrastructure redefining the global payments stack, we explore the architecture behind this shift, the real-world use cases driving adoption, and the trends set to unlock \$1 trillion in cross-border volume.

We hope this report serves as a roadmap for financial institutions, payment providers, policymakers, and entrepreneurs seeking to navigate, and build upon, this new era of value.

- Kevin de Patoul, CEO, Keyrock
- Daniel Vogel, CEO, Bitso

Key Insights

- 1. Why Wait Days to Pay 13x More?** — Banks charge **~13%** to send **\$200**. Stablecoins do it in seconds and up to 13x cheaper.
- 2. DeFi Is the New Balance Sheet:** DeFi credit protocols are turning into working capital engines. Mansa reported an average monthly capital turnover of **11x**, compared to just **1–2x** annualized capital turnover for traditional fintechs like Wise.
- 3. DeFi will be the biggest beneficiary of stablecoin growth:** **21%** of U.S. commercial deposits earn no yield (**~\$3.85T**), while treasury operations often take 1–5 days to move cash. These balances will shift into stablecoins to capture yield, with over **\$600m** already distributed directly through yield-bearing stablecoins.
- 4. Stablecoins Are Becoming a \$1 Trillion Payment Rail:** We estimate that by 2030, annual stablecoin payment volume across key verticals will be above **\$1 trillion**.
- 5. FX is stablecoins' endgame:** The \$7.5T/day market still settles on T+2 rails, reliant on correspondent banks and prefunding. Onchain FX improves this stack with **programmable swaps** and **atomic PvP**, enabling instant settlement with minimal counterparty risk. It's stablecoins' biggest opportunity yet, as tokenized assets, stablecoin rails, and banking infrastructure converge.
- 6. Stablecoins Are on Track to Capture 12% of Global Cross-Border Payment Flows:** Regulation, liquidity, and interoperability breakthroughs could see stablecoins move \$1 in every \$8 sent across borders by 2030.
- 7. Stablecoins will reshape monetary policy:** At **\$2 trillion** supply, stablecoins will hold close to **25%** of the Treasury bill market, directly impacting Fed policy and front-end yields.
- 8. Stablecoins Will Account for 10% of the U.S. Money Supply by 2030:** Stablecoins have grown from just **0.04% of M2 in 2020** to over **1% today**. Based on current growth rates and industry forecasts, they could comprise **10% of the U.S. money supply by 2030**, marking a major shift in the composition of liquid dollars.
- 9. Every Major Fintech Will Be a Stablecoin Fintech:** Just like every fintech adopted SaaS tools, every fintech will adopt stablecoin infrastructure: from wallets, treasury ops, to yield.

About This Report

Before mobile wallets and crypto, there was the traveler's check, introduced by American Express in 1891 as the first secure tool for cross-border payments.

These checks required a pair of signatures, one at issuance in your home country, and another when cashing out abroad, to confirm authenticity. Because they were backed by reputable financial institutions, they offered reliability and liquidity, easily converted into local currencies or used in transactions. In many ways, traveler checks were the original borderless money: portable, liquid, and privately issued.

Stablecoins are the traveler's check, reimagined. Like corporate-backed IOUs, they're liquid and trusted, but borderless by design. Existing in stateless form, they aren't tied to any one jurisdiction, making them natively interoperable with fragmented global banking systems.

Their real potential lies in emerging markets, home to 85% of the global population, yet underserved by traditional financial infrastructure. Stablecoin rails will unlock trillions in value by enabling faster, cheaper access to payments in regions long overlooked.

This report traces the evolution of legacy payments to the rise of stablecoin rails and explores how they're reshaping the global payments stack. We unpack the infrastructure behind them, the real world use cases gaining traction, and the shifts shaping their path to scale.

- **Section 1** traces how legacy payment rails evolved over decades as a risk-managed patchwork
- **Section 2** breaks down the three pillars of the legacy payment stack: SWIFT, prefunding, and netting, to show how each creates friction through latency, trapped capital, and limited access
- **Section 3** lays the groundwork by explaining what stablecoins are, and how they hold value and generate revenue, setting the stage for their role in powering payment rails
- **Section 4** unpacks the infrastructure behind stablecoin payments, from sandwich models to virtual accounts, and shows how they're evolving into full-stack networks that bypass legacy rails
- **Section 5** explores how stablecoins offer a fundamentally different architecture for cross-border payments, addressing core frictions through programmable liquidity, credit, and clearing.
- **Section 6** explores where stablecoins are gaining real traction: B2B, P2P, and card payments, highlighting their shift to mainstream use, and closes with Onchain FX, a still-early but foundational innovation in cross-border asset conversion.
- **Section 7** examines regulation, interoperability, liquidity, and programmability as the pillars now defining stablecoins' path to scale.

1.

The Infrastructure Divide

1. Introduction: The Infrastructure Divide

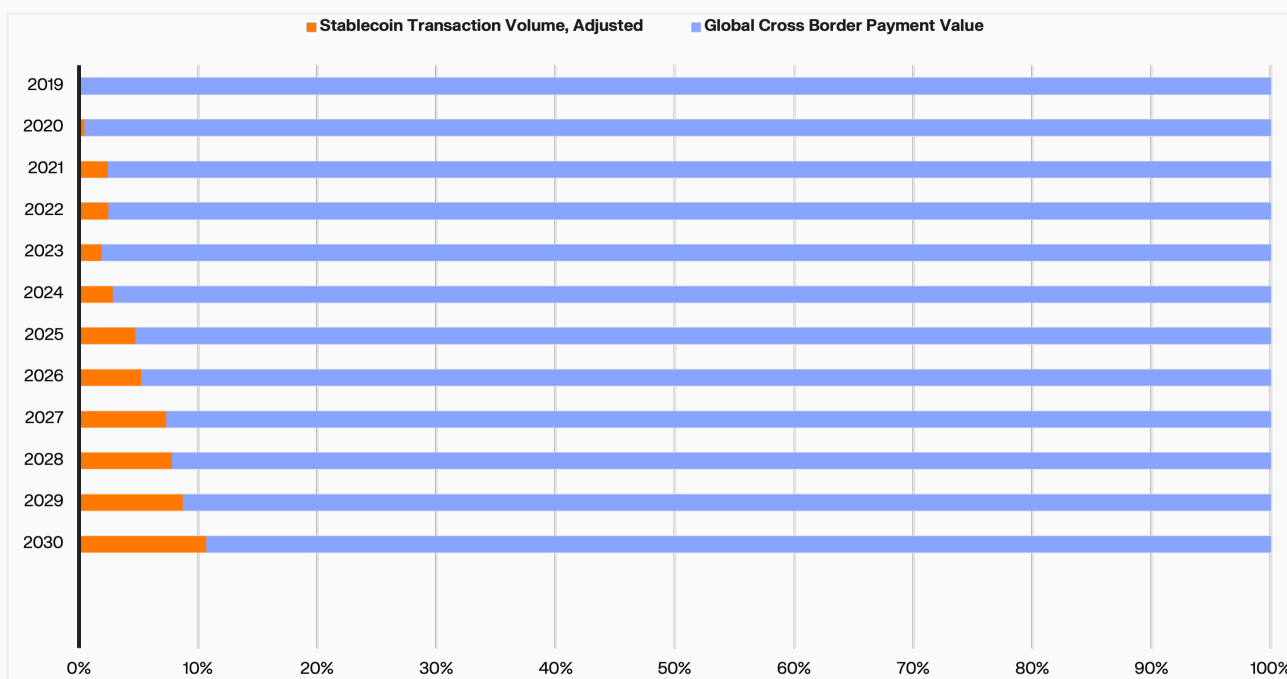
Fintech innovation depends on access to reliable financial infrastructure, the so-called “**fiat building blocks**”: APIs, payment rails, custody, and compliance providers. In developed markets, these tools are readily available. A U.S. founder can plug into Stripe, Plaid, and Visa and launch a payments app in weeks.

In emerging markets, that same founder would hit a wall. Infrastructure is fragmented, APIs are limited, and de-risking by global banks has cut off access to banking rails. Building the next Venmo isn't just harder, **it's structurally impossible**.

Global systems are built on a foundation that emerging markets can't access. Without the same building blocks, local entrepreneurs are locked out of building interoperable financial products, **no matter their ideas or ambition**.

Stablecoins are starting to bridge the gap, not just by speeding up transactions, but by bypassing the structural bottlenecks of legacy infrastructure. But if they're so promising, why did they make up **less than 3%** of the **\$195 trillion** global cross-border payment market in 2024?¹

Stablecoin Transaction Volume vs. Global Cross-Border Value 2019 - 2030



Source: Visa, Mckinsey, Keyrock

The short answer: regulation, liquidity, and poor interoperability with legacy systems. Assuming today's challenges around regulation, liquidity, and interoperability are addressed, stablecoins could account for **~12% of global cross-border payment volumes by 2030**. The opportunity, and the bottlenecks, only come into focus when we look under the hood of how money actually moves today.

"Our mission is enabling the digital representation of value by providing the financial products and infrastructure needed to unlock the full potential of digital assets. We started with market making to unify fragmented liquidity across venues, and we're now extending that foundation to OTC and payments. Stablecoins are the first mainstream proof that digitized value is more efficient, faster, and cheaper to move. We want to be the bridge between the digital and traditional financial systems."

— Kevin de Patoul, CEO of Keyrock

In global payments, USD is king. Roughly **90% of international trade** is invoiced in dollars, even when the U.S. isn't involved.² But clearing dollars isn't open to everyone. Non-U.S. banks must route through a small club of New York-based correspondent banks like JPMorgan, Citi, and BNY Mellon. Lose access to one, and you're effectively cut off from the dollar system.

That fragility is amplified in emerging markets, where access to dollars is critical and precarious. These markets rely on correspondent banking relationships to access the dollar system. However, when political risk or compliance concerns arise, major banks "derisk" by severing correspondent relationships altogether. They need to protect their own access to the clearing system.

"In the long run, we believe every financial institution will have to support stablecoin infrastructure in some form. Whether it's wallets, onchain settlement, or tokenized deposits, it's coming. The client demand is already there, especially from emerging markets where banking friction is highest."

— Devere Bryan, General Manager at First Digital

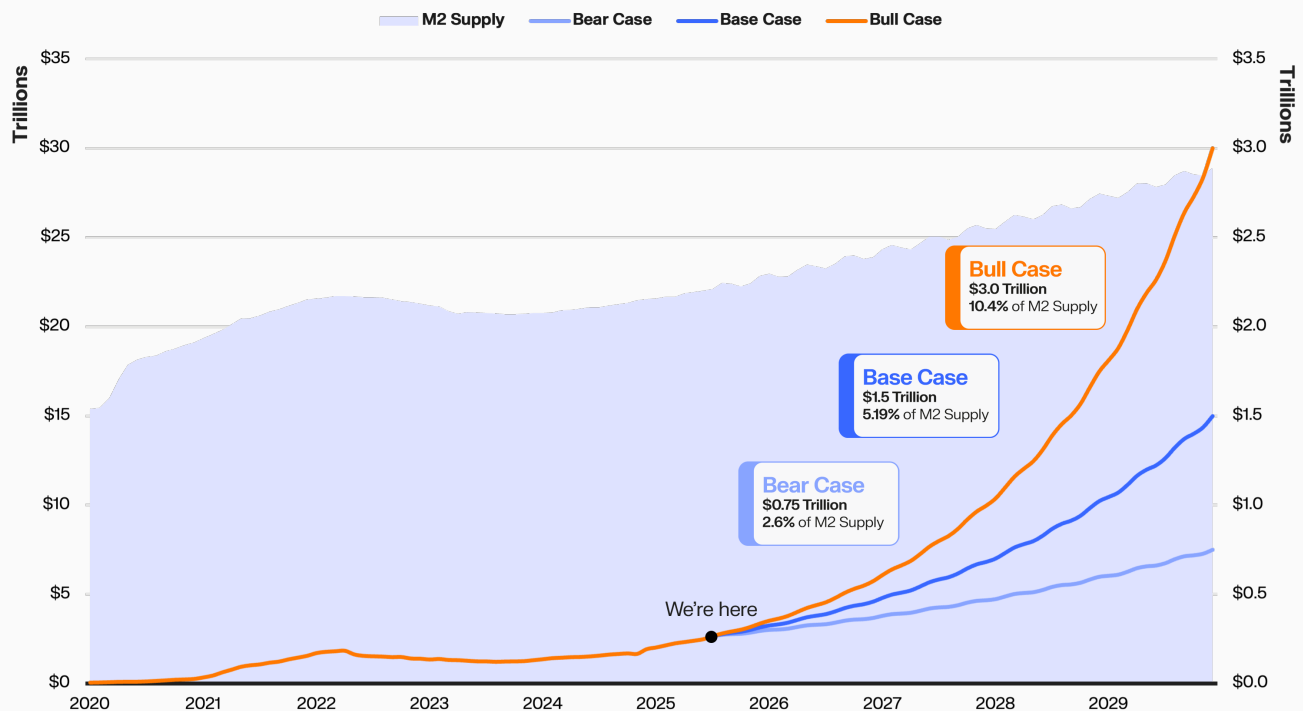
This is where stablecoins offer something radically new. They aren't just faster or cheaper. **They collapse the payment stack**, removing intermediaries, embedding compliance, and settling instantly across borders.

Stablecoins aren't just a new form of money, **they're a new model for how money moves**. By minimising operational friction, reducing compliance overhead, and unlocking trapped liquidity, they enable a fundamentally more efficient form of global value transfer.

They've grown from just **0.04%** of the **U.S. M2** in 2020 to over **1%** today. If current trajectories hold, they could comprise **10% of the U.S. money supply by 2030**, marking the rise of a parallel monetary layer.

The future of payment rails is onchain. That vision only makes sense in contrast to what stablecoins are replacing.

M2 Supply vs. Stablecoin Supply 2020 - 2030



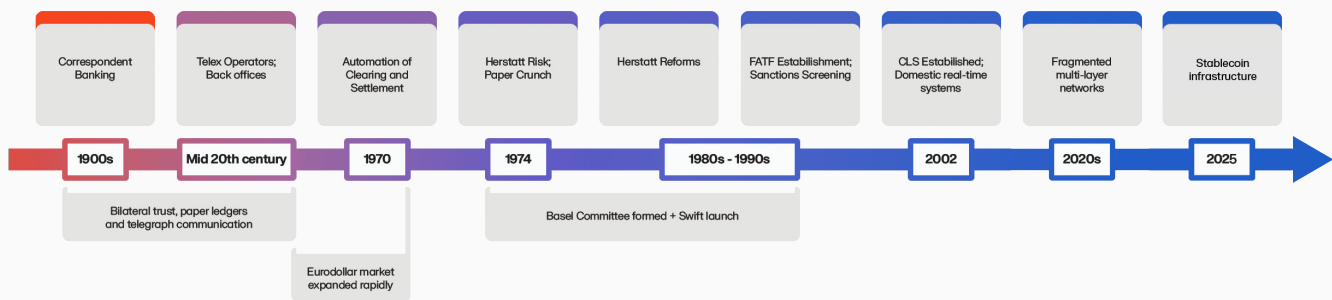
Source: Stablewatch, Defillama, Federal Reserve

1.1 History, A Legacy Of Layers

Today's cross-border payment system wasn't **designed**, it **accumulated**. Over decades, **layers of intermediaries** and compliance rules were bolted on to solve narrow problems, leaving behind a maze of inefficiencies.

The legacy payment system dates back to the **early 1900s**, when global trade was dominated by a few dominant trading nations and banking infrastructure remained primitive. Banks faced a fundamental challenge: how do you move money internationally when no global network exists?

The workaround was correspondent banking, a patchwork of **bilateral relationships**. Banks opened accounts with foreign partners, settled trades via **paper ledgers and telegraphs**, and trusted each other to keep score. That system, surprisingly, still underpins most cross-border payments today.



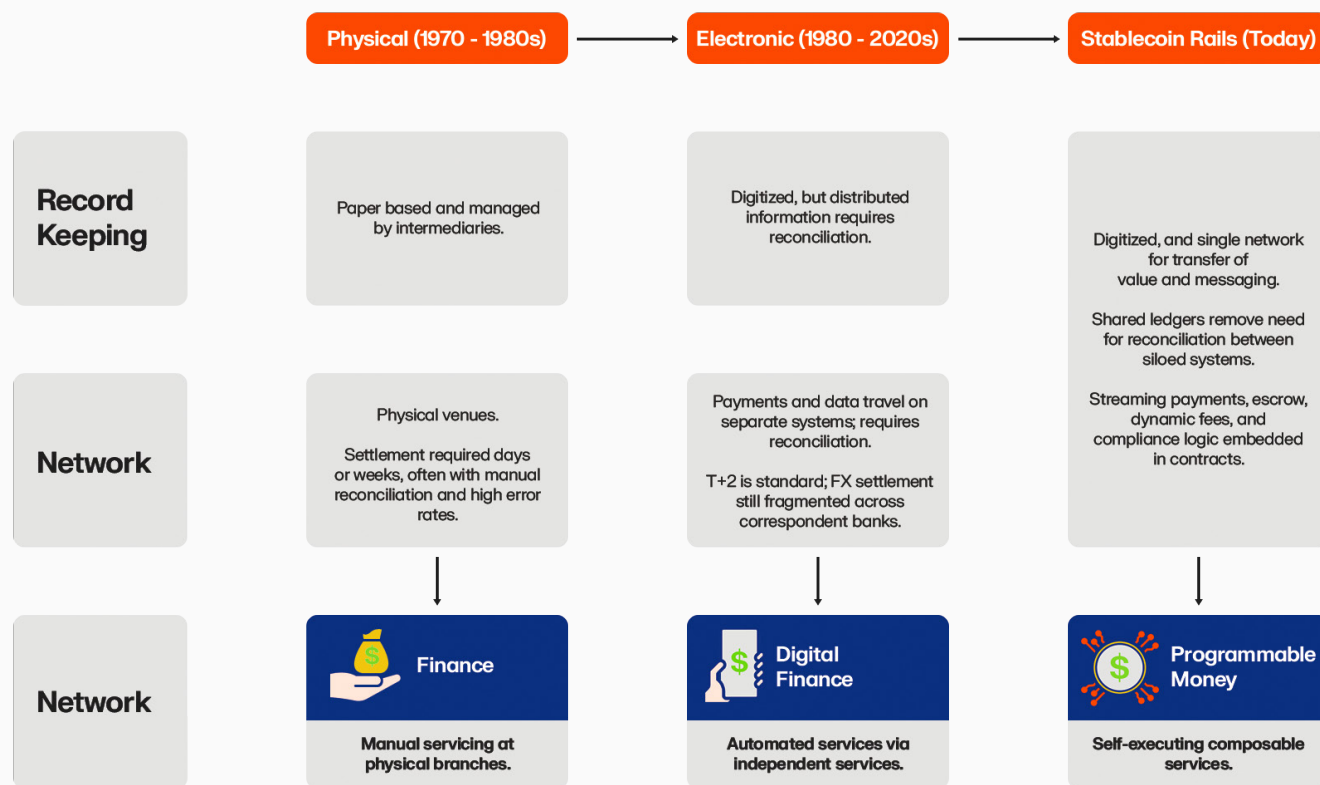
Source: Keyrock

In the 1950s, telex machines began to replace telegrams for transmitting payment instructions. Banks expanded their correspondent relationships and operational staff to handle the increasing volume of cross-border payments. **But even by 1977, 80% of cross-border payments were still sent by mail.**³ Telex improved speed, but required trained operators and introduced new sources of error, especially in bank back offices.

The system broke under its own weight. **As trading volumes tripled**, back offices couldn't keep up.⁴ The **"paper crunch" of the 1960s** caused error rates to spike and led to the collapse of **160 NYSE member firms**, forcing the U.S. to drive domestic settlement automation.⁵

In the 1960s and '70s, the **Eurodollar** market exploded. U.S. banks rapidly expanded abroad, especially in London, where branch counts grew fivefold between 1958 and 1974. In response, European banks formed correspondent networks and consortia to keep up.⁶

To support global growth, banks added more correspondent links across currencies. In 1970, the U.S. launched **CHIPS**, a clearing system for large-value USD payments, streamlining settlements among major banks. But outside the dollar system, nothing changed. **Emerging markets still had to rely on correspondent banking, with no access to global clearing.**



Source: Keyrock, Onyx by J.P. Morgan

In 1974, Herstatt Bank collapsed, and with it the illusion of a safe global settlement system. The German bank accepted Deutsche marks but defaulted before sending the matching U.S. dollars, exploiting a time-zone gap. The failure triggered a global reckoning. **Banks introduced stricter cutoffs, risk departments, and even more checks.** Regulators responded by forming the **Basel Committee**, laying the groundwork for global prudential oversight.

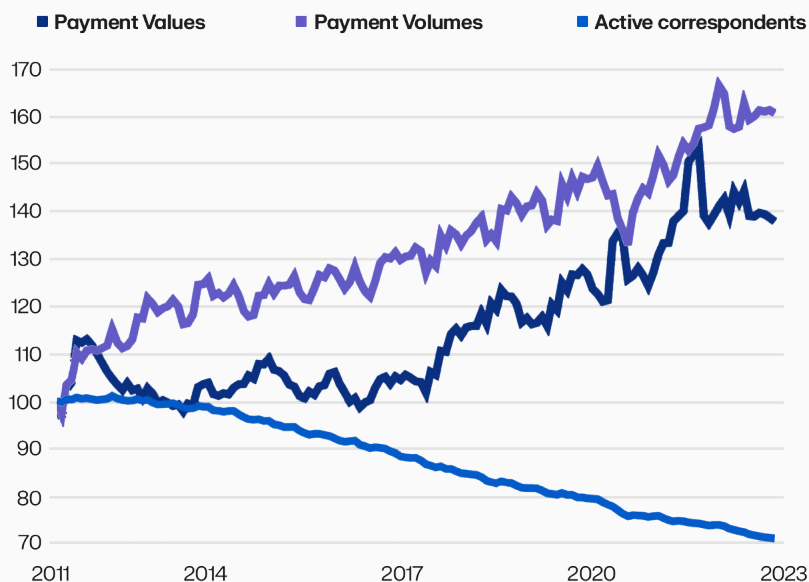
Around the same time, **SWIFT launched in 1977** to replace telex, bringing standardized secure messaging to global payments. But it only solved half the problem. SWIFT transmits instructions; it doesn't move money. Settlement still depended on the same old correspondent bank chains. The UI got an upgrade, the plumbing didn't.

By the 1980s and '90s, surging capital flows met a rising tide of regulation. The U.S. expanded anti-money laundering (AML) laws from its 1970 **Bank Secrecy Act**, and in 1989, the **FATF** was created to export **AML and KYC** standards globally.⁷ The Bank of England introduced formal KYC checks in the early '90s to block illicit actors upfront, while AML tools focused on post-facto detection. Each rule added compliance and complexity.

But regulation had consequences. **Between 2011 and 2022, correspondent banking relationships in emerging markets fell by 50%.⁸** Latin America, Africa, the Caribbean, and the Pacific were hit hardest. Faced with rising compliance costs and risk exposure, global banks **began derisking**, cutting off partners in entire regions to protect access to U.S. dollar clearing.

Active Correspondents have Decreased as Payments Values and Transactions Rise

in %



Source: BIS, SWIFT

Every transaction became a potential liability. Banks were required to screen flows against sanctions lists, monitor for suspicious behavior, and document everything. To manage the risk, they hired compliance teams and third-party screeners, adding more cost and more middlemen to every payment.

In 2002, CLS Bank launched to tackle FX settlement risk, enabling simultaneous settlement of both legs in a currency swap. **It began with 7 currencies, later expanding to 18.** But most emerging market currencies were left out. The risks that CLS aimed to fix still persist in much of the world. Real-time payment systems emerged domestically, but stopped at the border. Without cross-border interoperability, banks were still forced to stitch local systems together using correspondent rails.

This is the system we're left with. One international payment can pass through five or more intermediaries: **banks, FX desks, compliance checks, local clearing, global messaging.** Each layer was added to solve a problem, but none replaced the one before it.

This wasn't accidental. The system was designed to manage risk, in a world that lacked real-time computation, trusted code, or transparency.

But those constraints no longer exist. Stablecoins are the next evolution in payment infrastructure.

2.

The Global Money Machine

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Global payments run on three legacy pillars:

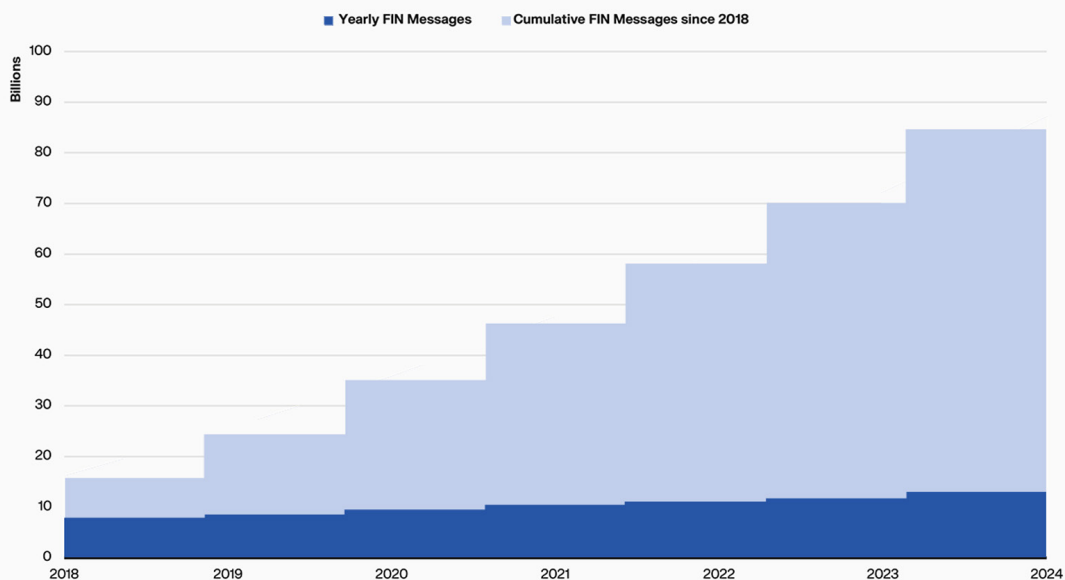
1. **SWIFT:** The messaging network for payment instructions
2. **Prefunding:** Pre-positioned liquidity in destination markets
3. **Netting:** Settlement through transaction offsetting

Stablecoins collapse all three layers into one programmable rail. **They're faster than SWIFT, eliminate the need to prefund, and beat netting on cost and speed.** The implications become clear when you examine how legacy systems actually function, and where they fall short.

2.1 The Old Rails Beneath Us, SWIFT

At the heart of cross-border finance is **SWIFT**, a messaging system that lets banks send instructions to one another. **SWIFT doesn't move money. It just tells banks where to send it.** In practice, a simple transfer might involve a chain of correspondent banks passing along SWIFT messages until the payment reaches its destination. SWIFT handles the international messaging while local banking rails like ACH, SEPA, or PIX handle the actual money movement at each end.

SWIFT FIN Message Growth

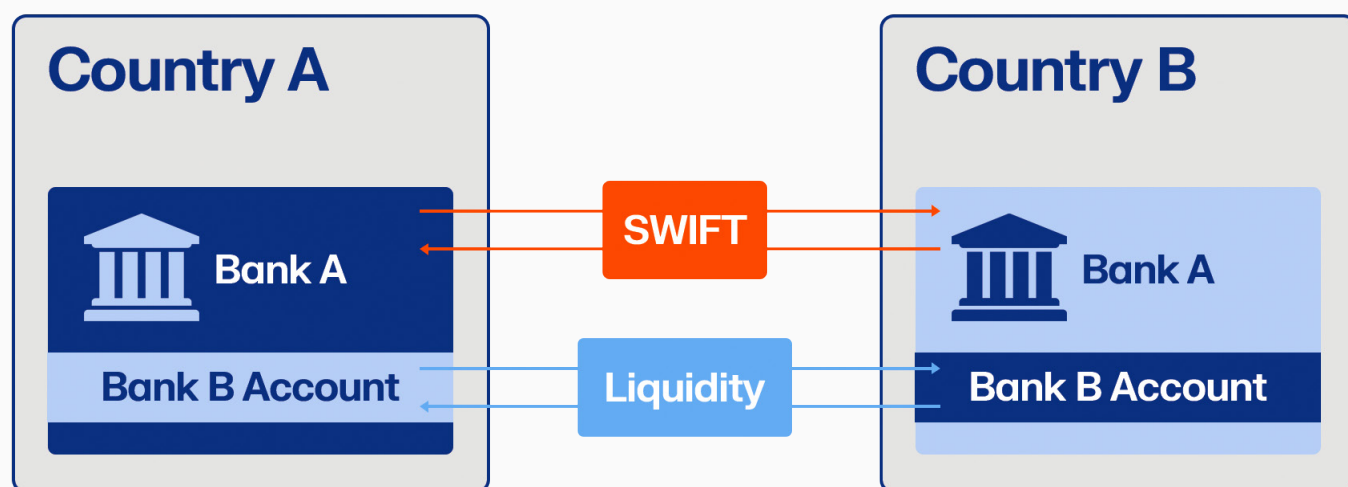


Source: SWIFT, Keyrock

Despite its reputation, SWIFT can be efficient in developed markets with robust correspondent networks. In developed markets such as the US, Europe, and Singapore, dense correspondent networks using SWIFT messaging mean 90% of payments reach destination banks **within an hour**, and **86%** involve a **single intermediary**.⁹

That performance doesn't carry over to emerging markets. Limited correspondent ties force multi-hop routes and **add latency**. Worldwide, just **43%** of transfers messaged over SWIFT credit end recipients within an hour.¹⁰

A transfer that clears in minutes between the US and UK can take days when routed to smaller markets in Africa or Southeast Asia. Emerging markets often face **2–3x longer processing times** and **3–8x higher transaction costs**.¹¹ Countries like **Angola** have lost nearly half their correspondent relationships, forcing payments through long intermediary chains, with settlements delayed 5 days or more.¹²



Source: Bedlam Research

Many factors contribute to delays: deteriorating correspondent networks, currency volatility, and market concentration. But at the root are **outdated infrastructure**, **regulatory friction**, and **poor integration** between domestic rails and international networks like SWIFT.

Instructions often get **misrouted** or delayed for **compliance checks**, with limited visibility into where or why the holdup happened. This lack of transparency is one reason fintechs are increasingly building around, and not on SWIFT.

"The market opportunity here is massive. You have trillions of dollars flowing across borders globally. It's still dominated by the SWIFT network, and that's a technology architecture that was developed 50 years ago. As stablecoins play a key role in payments infrastructure, the opportunity to modernise is now."

— Jack McDonald, SVP of Stablecoins at Ripple

2.2 The Cost of Being Fast, Prefunding

Since SWIFT only transmits messages, payment companies must **prefund** local bank accounts abroad to settle transactions instantly. These **nostro accounts** act as pre-positioned liquidity. When a user sends money, the provider debits the local balance to pay out immediately, then settles the cross-border value later.

Remittance firms and neobanks rely heavily on this model. For example, a US-based money transfer operator (MTO) offering payouts in Japan will hold a yen balance with a local bank. When a customer sends USD, the MTO immediately disburses JPY from that local pool, then settles the USD later.

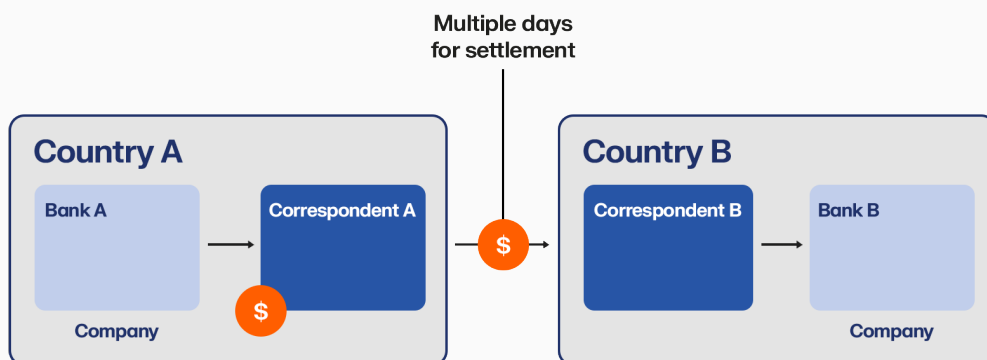
With funds already in-country, recipients can get paid within minutes, bypassing traditional cross-border delays. The sender's USD is later used to top up the local balance, often through batched settlement. **Prefunding trades speed for capital efficiency.** It enables near-instant delivery but forces firms to lock up large sums across dozens of accounts.

"With atomic settlement using stablecoins, the need for prefunding drops dramatically, or disappears entirely. With stablecoins, participants can transact without taking on credit risk, freeing up capital and eliminating one of the biggest inefficiencies in traditional cross-border flows."

— Arnold Lee, CEO and Co-Founder of Sphere Labs

Capital, Parked and Powerless

As a business scales, the **operational strain of prefunding balloons**. A fintech operating across 20+ countries may need to manage **dozens of local currency accounts**, each padded with idle balances to absorb daily volume swings. These accounts are regularly topped up with large amounts to support small-ticket payments (e.g., \$1,000 transfers). Once balances dip below a set threshold, they must be replenished, locking the firm into a constant cycle of capital top-ups.



Source: Bedlam Research

To meet payout demand across emerging markets, companies park millions of dollars in local bank accounts. As transaction volume grows, so does the required float, increasing the need for working capital or debt financing just to keep balances topped up. This ties up liquidity in **siloed accounts**, creating what's effectively a **capital trap**.

"Stablecoins are reshaping treasury for fintechs. Instead of pre-funding local accounts, firms can use just-in-time liquidity and deploy capital globally within minutes. Operations run 24/7, no more batch processing or weekend delays. Treasury visibility moves from lagging reports to real-time data. CFOs can track every dollar across their global operations instantly, impossible with traditional banking infrastructure"

— Chris Harmse, Co-Founder and CBO of BVNK

An estimated **\$27 trillion** is locked in prefunded nostro and vostro accounts. Dormant capital trapped across global payment rails.¹³ It can't be lent, invested, or put to productive use. Worse, MTOs often pay interest just to keep these idle balances alive.

At a 5% interest rate, parking \$1 billion in nostro accounts costs **\$50 million a year** in lost yield or financing. Industry estimates suggest the total cost of prefunding, including overhead, runs 3–5% annually. The drag goes beyond lost returns. Providers must constantly forecast liquidity for each corridor and rebalance accounts. **Too little, and transfers stall. Too much, and capital sits idle.** That's why fintechs like Wise and Remitly treat capital efficiency as a core metric.

The Cost of Keeping Float Afloat

In 2024, **Wise's** annualized capital turnover was only about **1.26x**, and **Remitly's** was about **2.23x**, meaning each dollar of working capital supported \$1.26 and \$2.23 of yearly revenue.^{14, 15} Put differently, Wise needed approximately \$0.79, and Remitly \$0.45 in float to process \$1 of yearly volume, highlighting how capital inefficient even top players are today.

The need to constantly top up dozens of local accounts reflects how fragmented and inefficient prefunded liquidity remains. Beyond tying up capital, this model forces fintechs to shoulder mounting **FX fees, bank charges, and staffing costs to reconcile balances** across markets.

Some fintechs spend millions each year just on reconciliation, before factoring in the cost of compliance checks for each local account and the infrastructure needed to manage hundreds of sub-accounts. Despite enabling faster end-user payouts, the prefunding model remains costly and difficult to scale.

“The legacy prefunding model traps capital in idle nostro accounts, introduces friction from settlement delays, and forces companies to predict volume in advance, wasting working capital and limiting treasury performance. We provide immediate liquidity the moment a transaction occurs, enabling T+Now treasury capabilities. Liquidity scales dynamically with actual flows, and settlement is instant, not days.”

— Nkiru Uwaje, Co-Founder and COO of MANSA

One Account, Many Ledgers

To simplify fragmented liquidity and improve operations, many fintechs rely on **FBO (For Benefit Of) accounts**: pooled custodial accounts managed by a financial intermediary on behalf of multiple end users. These allow fintechs to assign virtual sub-accounts to customers, while the underlying funds remain under the bank's control.

However, banks can't view individual customer balances within FBO accounts. They **rely entirely on fintechs** to maintain accurate ledgers. This lack of visibility poses a major challenge in emerging markets, where banks often hesitate to issue FBOs due to concerns over comingled records and reduced oversight against fraud.

To manage hundreds of virtual subaccounts within a single FBO pool, fintechs need robust **ledger systems** and **real-time transaction monitoring**. Without them, reconciling simultaneous transactions becomes error-prone, leading to fund misallocations and manual fixes. **Synapse** illustrated this risk clearly. After filing for bankruptcy in April 2024, it left over 100,000 customers with \$265 million in frozen deposits, caused by ledger failures and a \$65–\$95 million gap between reported and actual balances.¹⁶

While FBO accounts offer efficiency, they introduce significant overhead and add complexity to an already costly fintech launch. Firms must invest in **advanced ledger tools**, manage intricate **reconciliation** workflows, and absorb **ongoing operational costs**. Reconciliation alone can run into the **millions** annually, not including the added burden of building and maintaining proprietary ledger systems.

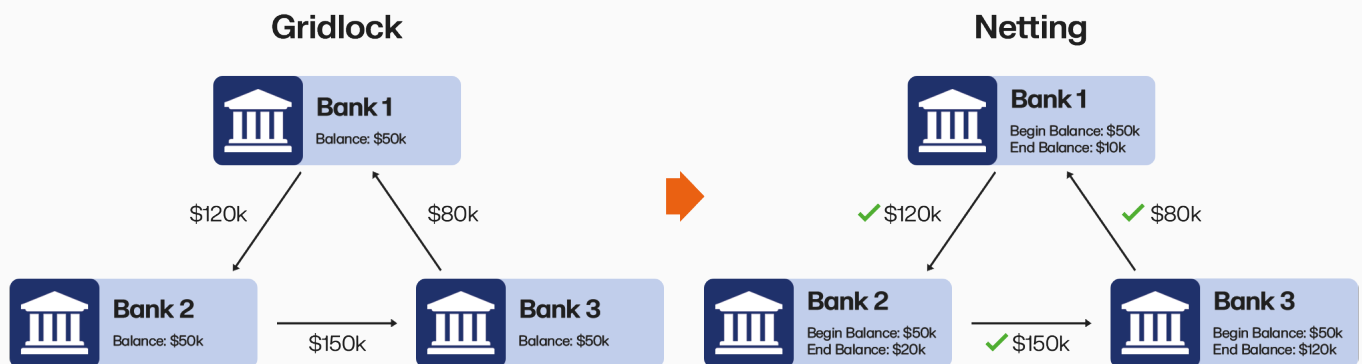
2.3 Netting: The Quiet Engine of Interbank Payments

While SWIFT and prefunding power most retail cross-border flows, a third system, **netting**, quietly underpins institutional finance.

Netting offsets mutual obligations so only the **net difference** is transferred. Rather than settling each transaction in real time, banks send payment instructions throughout the day and settle the final net amount later, typically through **central banks or clearinghouses**.

Netting significantly **reduces liquidity requirements**, since banks only need to cover their net outflows rather than every individual payment. However, this efficiency comes at the cost of **time delays** and **reliance** on a central coordinator, as settlements typically occur in batches at the end of the day.

The diagram below shows a scenario where participating banks cannot settle payments individually due to insufficient funds, resulting in **gridlock**. Central banks typically resolve these bottlenecks.



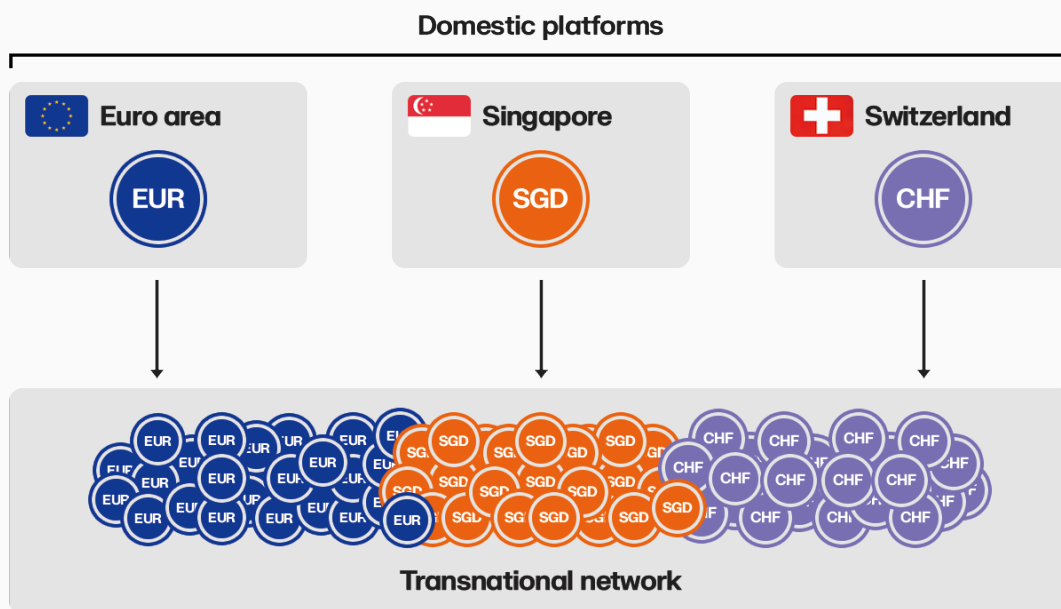
Source: BIS

Traditional netting arrangements have several **technical and operational limitations**:

1. **Netting relies** on a central authority to calculate obligations and enforce settlement. A single failure can halt the system.
2. Access is **highly restricted**, only licensed banks (and a few large non-banks) can join, excluding most fintechs.
3. Processes are often **opaque**, with limited visibility into how payments are prioritized or settled.
4. Netting uses **deferred cycles**, introducing **interim risk** if a bank fails before final settlement.

In response to these structural limitations, central banks are actively exploring ways to modernize interbank settlement. Over 90% are researching or piloting **central bank digital currencies (CBDCs)** to improve the efficiency of cross-border and interbank payments. Collaborative efforts like **Project Mariana** and **Jasper-Ubin** tested blockchains to enable decentralized FX settlement and more granular netting mechanisms.

Project Mariana's architecture links each central bank's domestic platform to a shared network via bridges, pooling currencies into a unified AMM. By enabling atomic PvP (Payment-Versus-Payment) on a common layer, it delivers real-time coordination and liquidity efficiency without batch netting. While traditional netting depends on centrally managed **clearinghouses**, Mariana signals a shift toward decentralized infrastructure with similar efficiency.



Source: BIS

These initiatives reflect a broader recognition: while netting is vital for liquidity management, the current centralized model falls short on accessibility and transparency.

"Ripple was founded to enable a world where money moves like information. This isn't abstract; banks around the world rely on our technology every day to deliver real results in the global economy."

— Jack McDonald, SVP of Stablecoins at Ripple

3.

Stablecoins 101

3. Stablecoins 101

Before we compare stablecoin-based payment rails with traditional infrastructure in Section 4, it's important to understand stablecoins: **what they are, how they maintain price stability, how issuers generate revenue, and the scale of their monetary footprint.**

These fundamentals shape how stablecoins function in practice, explains the trust users place in them, and **reveal** the incentives behind their rapid growth. They also highlight the deeper **macroeconomic significance** of stablecoins, whose growing presence in U.S. Treasury markets signal their emergence as **monetary system participants.**

"The growing internet financial system enhances traditional payment rails. Transactions powered by stablecoins like USDC enable near-instant, secure, global money movement across previously fragmented networks. Global stablecoin adoption has skyrocketed, with USDC in circulation nearly doubling year over year to more than \$64 billion as of August 2025. The frictionless exchange of value is no longer theoretical. It's playing out in real time."

— Claire Ching, VP, Global Capital Markets at Circle.

3.1 The Rise of Stablecoins

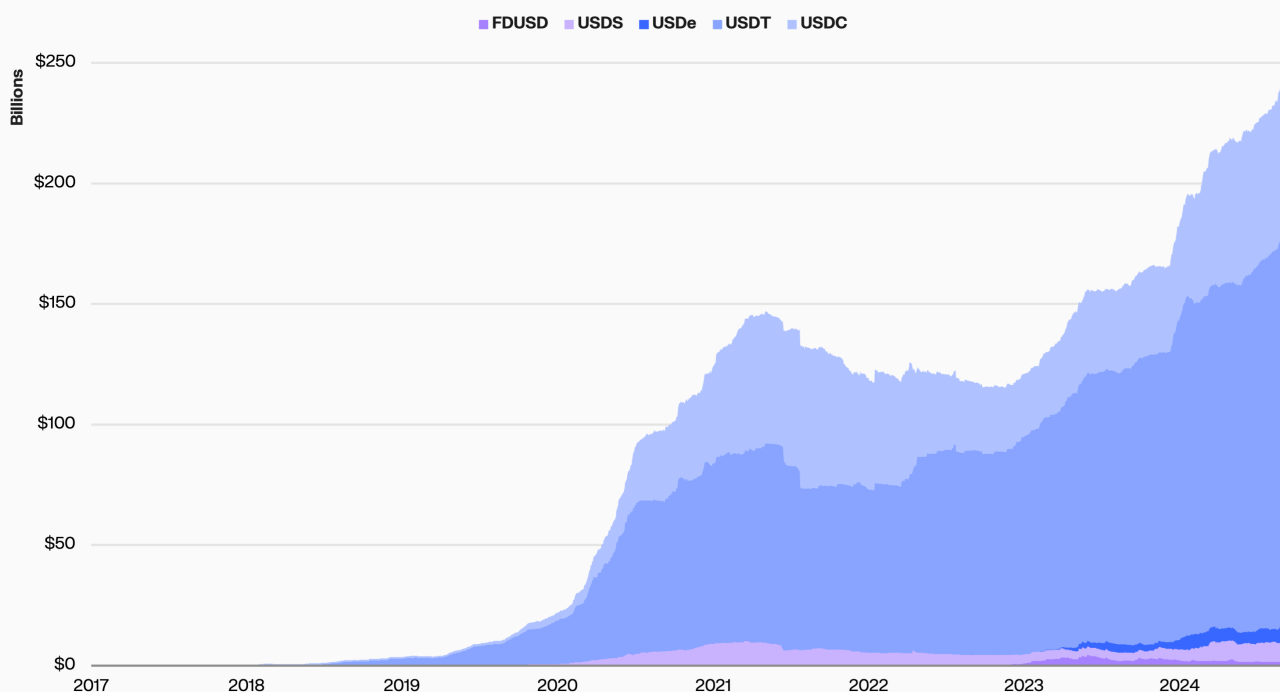
Stablecoins are tokens pegged to fiat currencies, aiming to combine the stability of dollars with the programmability of crypto. The first wave of stablecoins emerged in the mid-2010s with projects like **BitUSD** and **NuBits**, which relied on crypto collateral or algorithmic mechanisms to maintain a dollar peg. Both eventually failed, BitUSD lost its \$1.00 peg by 2018, and NuBits collapsed to mere cents, highlighting how hard it is to maintain stability without diversified or robust reserves.

Tether (USDT) launched later in 2014 with a different model, a fiat-backed stablecoin, claiming each USDT was backed 1:1 with U.S. dollar reserves. Its breakout moment came in 2017, when **Binance** adopted it as the primary quote currency during its rise to the top of crypto trading. Offshore exchanges, facing regulatory hurdles with actual USD rails, turned to Tether as a de facto dollar substitute.

This created a network effect. As more exchanges and traders adopted USDT, it became the default unit of account in crypto markets.

Market Cap Evolution of Leading Stablecoin Issuers

2018 - 2025



Source: RWA.xyz, Keyrock

Circle launched **USDC** in **2018** as a transparent stablecoin built for use globally. USDC is backed 100% by **highly liquid cash and cash-equivalent assets** and is redeemable 1:1 for US dollars. With **monthly attestations** from a Big Four accounting firm and a regulation-first philosophy, Circle sets a high standard for compliance and trust.

Thanks in part to Circle's strong record of transparency and governance, USDC became a stablecoin of choice for global firms building payment apps, treasury tools, and global settlement infrastructure, among other onchain projects.

3.2 Value in Motion

Institutional control over mint or redeem functions of stablecoins directly affects **liquidity, trust**, and the **mechanics of the peg**. It determines who can **inject** new tokens into circulation or **withdraw** them for real dollars. Key levers that ensure the 1:1 parity.

Typically, only a select group of **authorized institutions**, such as exchanges, fintech firms, and payment platforms can obtain fully reserved stablecoins directly from the issuer. These entities must complete onboarding processes before accessing **minting portals**. Once approved, they can wire U.S. dollars to the issuer, which then mints the equivalent amount of stablecoins onchain.

Broadly speaking, once minted, stablecoins function like any standard token on a public blockchain. Transfers are executed through onchain transactions, typically conforming to token standards like ERC-20 (Ethereum) or SPL (Solana). When a user initiates a transfer, they sign a transaction with their **private key**, specifying the recipient's **wallet address** and the **amount**. The transaction is then **broadcasted** to the network, **validated** by nodes, and **recorded** on the ledger.

Critically, stablecoins do not move through centralized intermediaries during transfer. Instead, token balances are updated directly in the **smart contract's internal ledger**. For example, when Alice sends 100 USDC to Bob, the USDC smart contract reduces Alice's onchain balance and increases Bob's. No offchain movement of collateral is involved.

"The most successful stablecoins will be the ones that are boring, in a good way. Regulated, transparent, well-collateralized. Predictability, that's what institutions want. That's the segment we're building for."

— Devere Bryan, General Manager of First Digital

3.3 The Revenue Behind the Peg

For some stablecoin issuers, not every dollar received for minting a stablecoin sits idle as backing. Some dollars are invested in low-risk, highly liquid instruments like **short-term U.S. Treasuries** or **overnight repurchase agreements**.

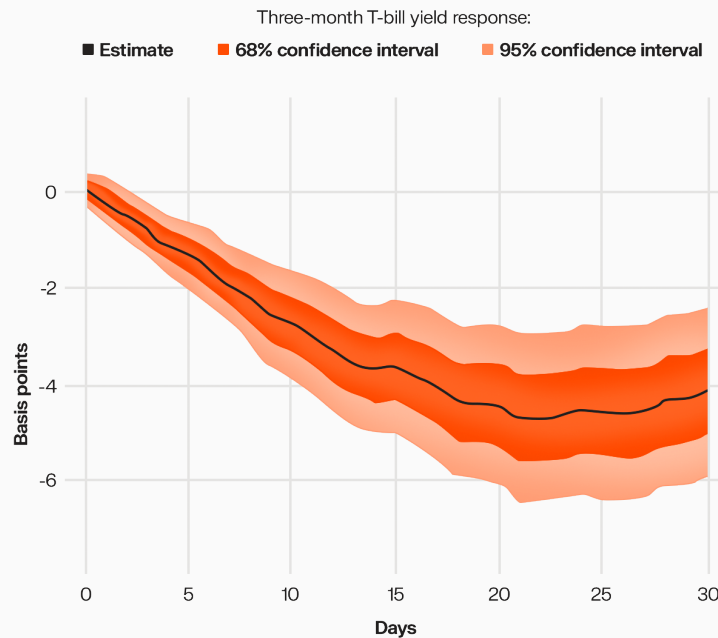
However, it's important to note that in most cases, the interest generated from U.S. Treasury holdings or reverse repos is retained by the stablecoin issuer to support operations, risk management, and long-term sustainability. Following the 2025 signing into U.S. law of the GENIUS Act, which prohibits stablecoins from paying interest or yield, this **is expected to remain the standard practice** among stablecoins regulated under U.S. law.

"Ondo started with a simple goal: make foundational assets like U.S. Treasuries accessible to global investors. We were the first to bring tokenized Treasuries onchain, and with over \$1.4b in TVL, we now lead this category alongside giants like BlackRock and Franklin Templeton. With Ondo Global Markets, we're extending our mission by offering tokenized access to 100+ U.S. public stocks and ETFs."

— Ian De Bode, Chief Strategy Officer of Ondo

This scale has real macro impact. According to BIS researchers, every **\$3.5 billion increase** in stablecoin supply **lowers** three-month Treasury yields by **2.5 to 5 basis points**. As stablecoin issuers channel capital into T-bills, they've become active participants in the yield curve, introducing a new transmission mechanism through which nonbank liquidity can shape money market rates and influence **Fed funding conditions**.

Stablecoin Inflow can put Downward Pressure on T-Bill Yields

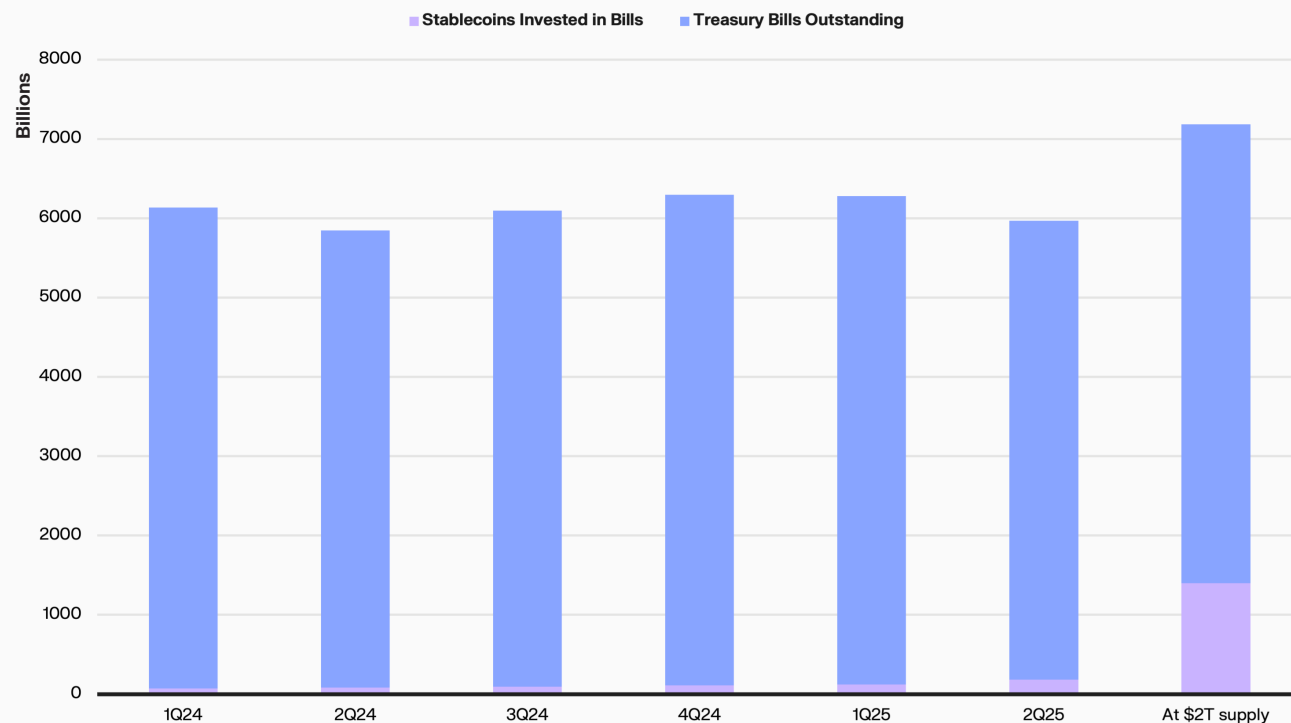


Source: BIS Annual Report - 2024/2025

"There's a massive amount of U.S. dollars in circulation today not earning any yield. If even a fraction of that shifts into yield-bearing formats, it could dramatically reshape demand for Treasury bills, and reduce their yield. We're only just beginning to see the impact, but it's going to grow fast."

— Stefan George, Co-Founder of Gnosis Pay

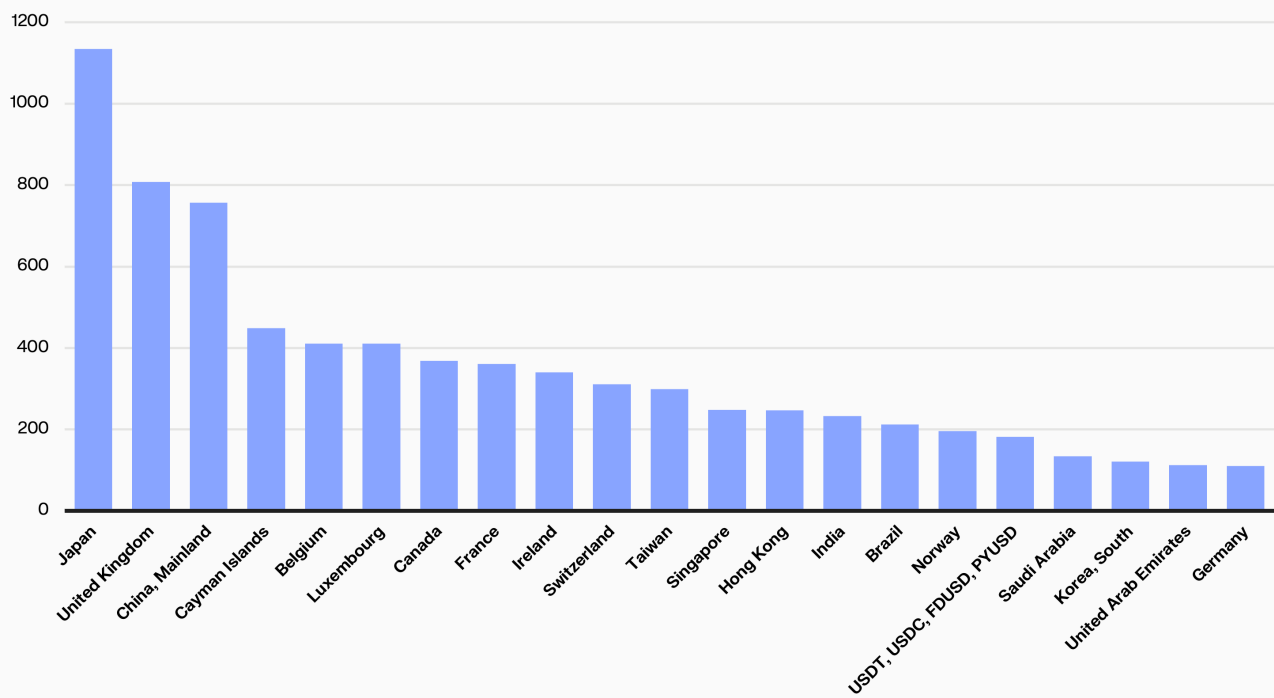
Stablecoin Will Reshape Monetary Policy



Source: Federal Reserve, Keyrock

Stablecoins will reshape monetary policy. **At \$2 trillion supply**, stablecoins could hold close to **25% of the Treasury bill market**, directly impacting Fed policy and front-end yields. Furthermore, major stablecoin issuers already hold more U.S. Treasuries than countries like South Korea, Germany, and Saudi Arabia, ranking **17th** globally in total holdings. Their presence is **already** shaping demand at the short end of the curve.

Stablecoin Issuers Rank 17th among Countries in U.S. Treasury Holdings



Source: Federal Reserve, Keyrock

4.

Building the Stablecoin Payment Stack

4. Building The Stablecoin Payment Stack

Now that we've established what stablecoins are, how they hold value, and why they're gaining macroeconomic relevance, we turn to a more fundamental question: *how do they move?* Understanding stablecoins as monetary instruments is only part of the picture. Grasping their full impact requires a closer look at the **infrastructure** that enables them to function as **payment rails**.

Section 4 focuses on that infrastructure. We start with the **stablecoin sandwich model** and **virtual USD accounts**, core primitives that let users send, receive, and hold dollars outside traditional banks. From there, we explore how stablecoin platforms are evolving into fully **integrated payment networks**, where users can save, spend, and earn entirely within stablecoin-native systems. This shift matters because it reveals where the real transformation is happening, not just in what money is, but in how it moves, who controls it, and what improves on the **legacy stack**.

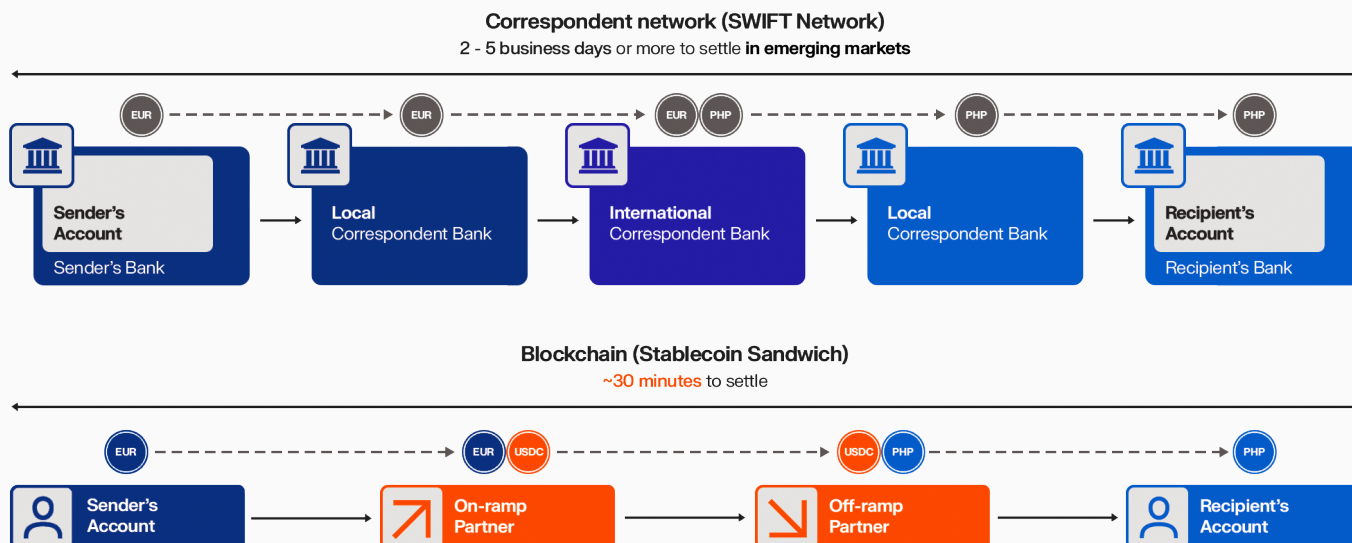
4.1 The Bridge to Virtual Accounts

Stablecoin rails enhance existing payment systems by allowing users to **bypass parts** of the legacy payment stack. In doing so, they cut out layers of intermediaries and build a more **unified** financial infrastructure that links everything from currency issuance to point-of-sale transactions.

As stablecoins **shift** from their original trading purpose toward mainstream payments, stablecoin payment companies are simultaneously **transforming into comprehensive payment networks**. These platforms reach consumers directly and enable users to save, spend, earn, and send money on a single platform.

Before exploring the evolution of payment companies and the **stablecoin value accrual stack**, we first introduce the foundation that enabled this shift, the **stablecoin sandwich model and USD virtual accounts**.

Correspondent Network vs. Stablecoin Sandwich



Source: BVNK

The **'Stablecoin Sandwich' model** streamlines cross-border payments through three layers: fiat currency on one side, stablecoins in the middle for transfer, and fiat currency on the other side. This replaces the middle layer of correspondent banks with a simple bridge.

1. **Onramp:** Sender converts their local fiat (e.g., USD) into a stablecoin (e.g., USDC).
2. **Transfer:** The stablecoin is then transferred onchain to an address or "virtual account"
3. **Offramp:** The recipient's stablecoins are converted into their local fiat (e.g., BRL) for withdrawal or use

To make this model more accessible, scalable, and bank-compatible, companies began layering in **stablecoin virtual accounts**: digital USD accounts that mimic the functionality of U.S. bank accounts but run entirely on stablecoin infrastructure.

"We've used the stablecoin sandwich model with PSPs like dLocal for years. What's evolving now is orchestration. Layer1 automates flow between wallets, ramps, venues, and banks. As more assets get tokenized, this coordination layer becomes essential. Stablecoins will increasingly displace local rails, but near-term transactions still involve fiat, making orchestration the core capability for scaling."

— Chris Harmse, Co-Founder and CBO of BVNK

This model **removes reliance on local or correspondent banks** for dollar deposits. Because stablecoins sit outside the banking system until needed for settlement, users avoid delays, visibility issues, and compliance burdens. Funds remain accessible and pre-positioned while moving with fewer intermediaries, improving traceability and reconciliation. With virtual accounts, **any wallet can function as a bank account.**

The diagram illustrates the flow of funds for a corporate virtual account system, showing the process from a Payer Bank Account to User Bank Accounts.

Flow 1: Payer Bank Account to User 1 Bank Account

- Payer Bank Account** (User 1 Bank Account) sends a **USD Transfer (ACH & WIRE)** to **Acme Corp's Virtual Account**.
- Acme Corp's Virtual Account** sends a **USD Transfer (ACH, WIRE, RTP)** to **User 1 Bank Account**.

Flow 2: Payer Bank Account to User 2 Bank Account

- Payer Bank Account** sends a **USD Transfer (ACH & WIRE)** to **Acme Corp's Virtual Account**.
- Acme Corp's Virtual Account** sends a **Mint USDC** to the **Blockchain**.
- The **Blockchain** sends a **Deposit USDC** to **Acme Corp's Brale Wallet**.
- Acme Corp's Brale Wallet** sends a **Burn USDC** to the **Blockchain**.
- The **Blockchain** sends a **USD Transfer (Tron)** to **User 2 Bank Account**.

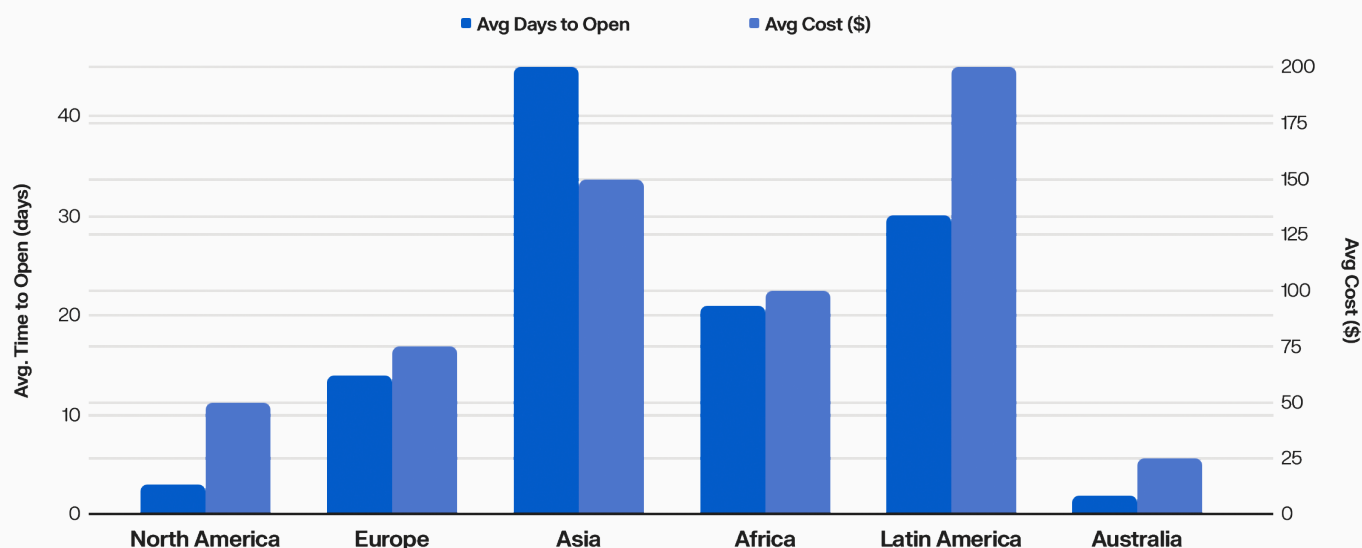
Flow 3: Payer Bank Account to User 3 Bank Account

- Payer Bank Account** sends a **USD Transfer (ACH & WIRE)** to **Acme Corp's Virtual Account**.
- Acme Corp's Virtual Account** sends a **Mint USDC** to the **Blockchain**.
- The **Blockchain** sends a **Deposit USDC** to **Acme Corp's Brale Wallet**.
- Acme Corp's Brale Wallet** sends a **Burn USDC** to the **Blockchain**.
- The **Blockchain** sends a **USD Transfer (Base)** to **User 3 Bank Account**.

For banks, this model is simpler. They only handle the local on/off ramp. After conversion to USDC as a regulated issuer, the bank exits the cross-border flow. Chargebacks don't apply on the onchain leg, and custody plus AML/sanctions/Travel-Rule duties sit with the issuer/VASP. In documented implementations, this has materially reduced banks' cross-border compliance workload (often **~50-90%** in case studies).¹⁷

The impact is especially profound for entrepreneurs in emerging markets. Previously, securing an EIN and opening a U.S. business account could take up to **six weeks**. With USD virtual accounts, provisioning can take minutes. USDC funding is instant, while fiat top-ups clear on their rail.¹⁸ More importantly, these accounts **unlock access** to developed markets. U.S. marketplaces like **Amazon require** ACH-enabled, named USD accounts matching the merchant's registration. Virtual accounts make this possible across borders. Geographic restrictions disappear, and every market becomes reachable.

Time and Costs to Open a Business Bank Account



Source: Squads.xyz

4.2 Owning The Stablecoin Stack

Stablecoin payment platforms are moving beyond the sandwich model and **evolving into full-fledged payment networks** where users can spend, save, and earn directly within stablecoin-native accounts. These networks have the potential to **monetize every layer** of the stablecoin stack: **issuance** (treasury deposits), **network activity** (transaction fees), **capital markets** (DeFi yield), and **end-user services** (consumer applications), all while delivering more value back to users.

"We're seeing a clear shift: stablecoin payment companies are evolving into full-stack financial networks. Stripe's recent acquisitions are a signal of that direction. SphereNet is built on that same thesis, a shared ledger tailored to regulated payment firms, offering a new backbone for interoperable, compliant payments infrastructure."

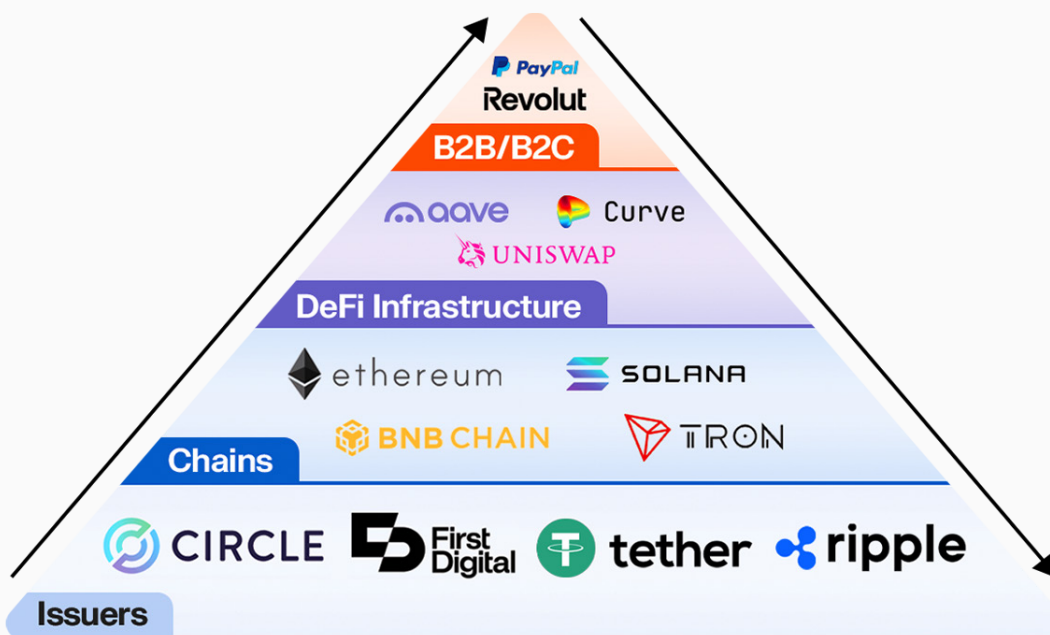
— Arnold Lee, CEO and Co-Founder of Sphere Labs

Companies like **Stripe** are positioned to own the full stablecoin value stack. Issuers capture the most economic upside, so firms like Bridge have allowed fintechs to introduce their own stablecoins (e.g., USDB), allowing them to capture fees throughout the whole payments process.

This shift helps explain why major fintechs are launching their own stablecoins. Programmable money lets them control the **full payment stack, streamline reconciliation and yield**, and leverage their existing **distribution advantages** (e.g. Revolut's 50 million active users). Stablecoins are entering a **new phase of verticalization**, where early pioneers face growing competition from institutions that already command scale and market reach.

"The biggest opportunity is in onboarding real users and building distribution channels that work. Crypto has always been great at innovation, but distribution is our Achilles' heel. That's where centralized exchanges like Coinbase and Binance are winning."

— Stefan George, Co-Founder of Gnosis Pay



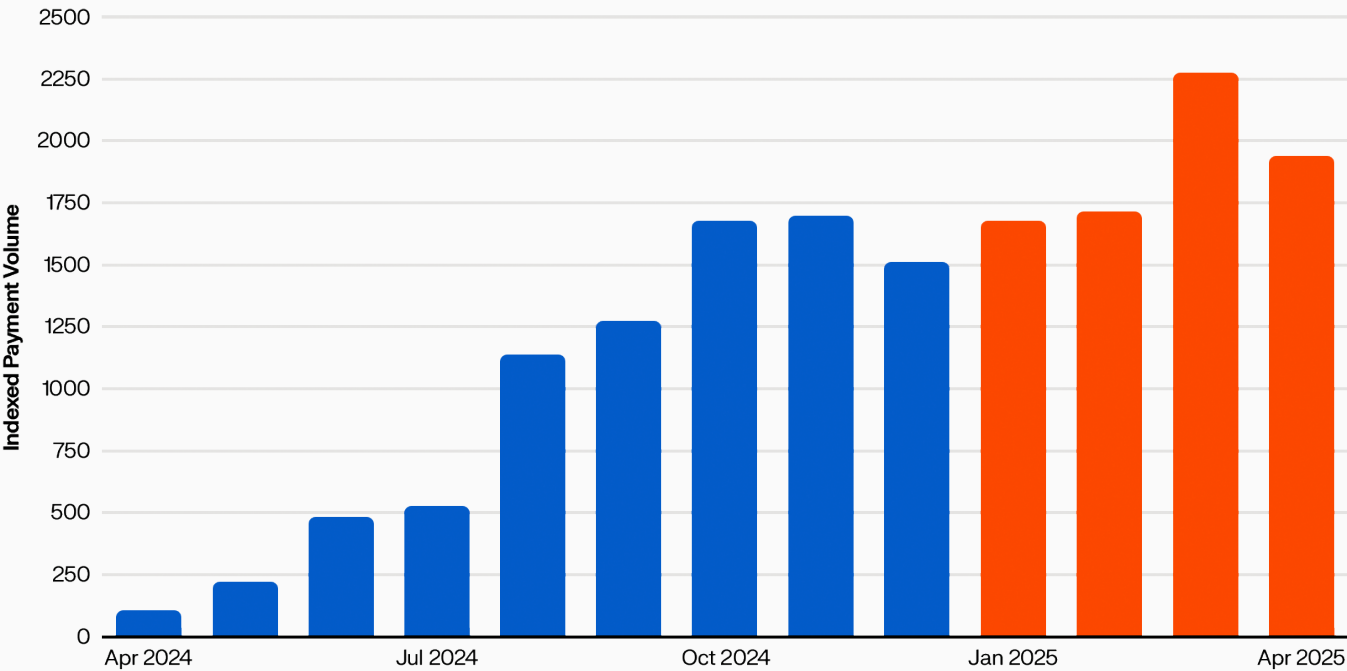
Source: Keyrock, @proofofnathan

This transformation is already in motion. Across the financial stack, stablecoin players are expanding their capabilities:

- 1. Stablecoin issuers like **Circle** (with its Circle Payments Network) are expanding beyond issuance to build **orchestration networks** that facilitate transaction routing and settlement between members.
- 2. Payment orchestrators like **BVNK** (Layer1) are creating blockchain-enabled systems to connect PSPs, banks, and wallets on a unified network.
- 3. Payments-focused blockchains such as **Sphere** (Spherenet) are also moving closer to the end-user, embedding themselves deeper in the payment stack.

According to internal data from Sphere Labs and Messari, **Sphere Labs** has seen a **20x** year-over-year surge in payment volume across long tail markets. By targeting underserved, high-inflation regions, Sphere offers instant dollar-settled payouts that reduce FX costs and chargeback exposure.

Sphere’s Payment Volume Across Long Tail Markets



Source: Messari, Sphere

5.

Bridging the Legacy Stack

5. Bridging the Legacy Stack

With stablecoin infrastructure taking shape, we can now return to the **core question**: can these rails outperform the system they're poised to replace? Earlier, we saw how legacy cross-border payments rely on a web of intermediaries (e.g. SWIFT, prefunded accounts, and centralized netting) that **slow down settlement, trap capital, and fracture** global money movement.

Section 5 explores how stablecoins tackle these pain points directly. From turning static liquidity into **high-velocity working capital** to replacing batch netting with **smart contracts**, stablecoin rails offer a fundamentally different architecture. What SWIFT, prefunding, and clearinghouses achieved with **layers of coordination**, stablecoins now deliver with **code, transparency, and composability**.

5.1 The Bridge Between Fragmented Rails

Stablecoin payment rails aim to **replicate the strengths** of SWIFT, prefunding, and netting, while stripping out their biggest limitations. Just like every fintech adopted SaaS tools, every fintech will adopt stablecoin infrastructure: from wallets, treasury ops, to yield.

Legacy cross-border payment systems often clash with domestic rails that don't natively connect to SWIFT, forcing **manual intervention** at national boundaries. In contrast, stablecoin-based transfers move value directly between sender and receiver **without relying** on a chain of correspondent banks.

Stablecoins act as a **universal translator** for money. They simplify the "last mile," where value is converted to local fiat, by directly linking domestic payment systems. Instead of building dozens of bilateral integrations, stablecoins provide a **shared layer** that enables instant, two-way flow between local rails and the global financial network.

A study by **BVNK** found that stablecoin settlements for large payments (€100k and above) were **3–5x faster** and up to **10x cheaper** than SWIFT.¹⁹ Another advantage is full end-to-end **transparency**. By operating on a shared, internet-native value rail, stablecoins reduce dependence on correspondent banks and manual cross-border handoffs. The result is a more unified network where any participant, whether a bank, fintech, or crypto wallet holder, can transact directly with another.

"BVNK started by helping businesses send and receive stablecoin payments through a simple API. We handled licensing, liquidity, and banking behind the scenes. Now, we're seeing demand for more modular, self-managed infrastructure. That's why we launched Layer1. The challenge we're solving is orchestration. The future isn't one stablecoin on one chain, it's many networks, linked by smarter coordination."

— Chris Harmse, Co-Founder and CBO of BVNK

Avg. Settlement Times For A EUR 100k Tx

	SWIFT Network	Stablecoins
South-East Asia > Europe	3 days	3x faster
Africa > Europe	5 days	5x faster
UK > Europe	< 24 hours	Equivalent

Cost Estimates

	SWIFT Network	Stablecoins
South-East Asia > Europe	3-4% FX Fee < \$30 SWIFT Fee	3-4x cheaper
Africa > Europe	3-4% FX Fee < \$30 SWIFT Fee	5-10x cheaper
UK > Europe	0.2-0.5% FX Fee < \$30 SWIFT Fee	Equivalent

Source: BVNK

Stablecoins aren't replacing domestic banking rails like ACH in the U.S., PIX in Brazil, or UPI in India. Instead, they're emerging as the **connective tissue** between them. Rather than acting as a standalone rail, stablecoins run on top of domestic systems. One possible outcome isn't for every retail user to switch from fiat to USDT, but for global platforms to use USDT to settle cross-border payments between local endpoints.

“There’s this idea that stablecoins compete with banks. In reality, they complement each other. Banks provide fiat rails, custody, compliance, all essential. Stablecoins offer speed and programmability. The magic happens when you combine both.”

— Devere Bryan, General Manager at First Digital

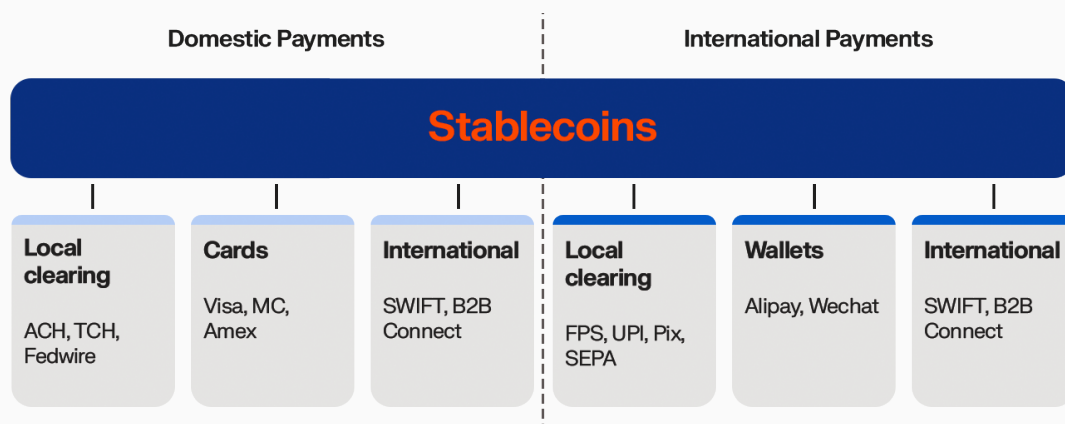
In this role, stablecoins function more like Stripe or Plaid for the global value layer, a developer primitive for **orchestrating payments** across disconnected systems. They’re not just assets, but **infrastructure**, and increasingly, a **unit of account**.

Unlike SWIFT, where each correspondent handles **compliance** separately, stablecoins can embed compliance. Platforms can integrate identity checks, blacklist screening, and even enforce spending limits through smart contracts. This allows regulatory requirements to be enforced directly **within the transaction flow**.

“Through SphereNet, we’re building a shared ledger purpose-built for regulated entities, with compliance and KYC sharing baked into the infrastructure itself. Privacy and confidentiality are also key, we’re designing the system to meet the high standards financial institutions expect, while unlocking the speed and efficiency of stablecoin-based settlement.”

— Arnold Lee, CEO and Co-Founder of Sphere Labs

Just as **Voice-over-IP** enabled phone calls to travel over the internet, stablecoins let money move online by **treating fiat like packets of data**. This doesn’t mean banks or domestic systems will vanish. Instead, stablecoins can **augment and link them**, and over time, banks may even adopt stablecoins as part of their domestic infrastructure.



Source: Simon Taylor, Fintech Brain Food

5.2 Working Capital at the Speed of Settlement

Stablecoin rails don't just solve for SWIFT's speed and interoperability gaps, they also offer a path around prefunding. Rather than tying up capital in overseas accounts, fintechs can access **on demand liquidity** using stablecoins. Several leading companies have already built models around this idea.

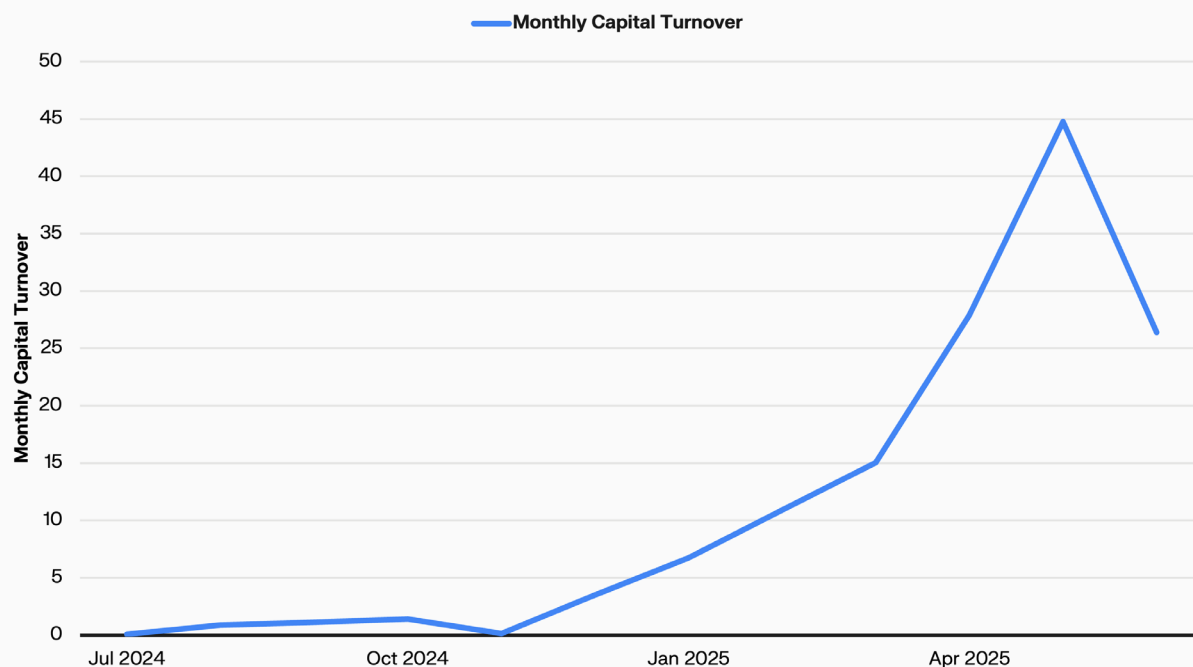
MANSA is a standout example, offering revolving stablecoin credit so institutions don't have to prefund each market. A fintech needing to disburse \$1 million in Brazil can draw in USDT from MANSA, transfer instantly onchain to its local partner, offramp to BRL, and repay the line in USDT. It functions like a **short-term working capital facility**, synchronized to settlement cycles

The result is extraordinary **capital efficiency**. Since each stablecoin loan is repaid within days, the same funds can be cycled repeatedly. In 2025, MANSA reports an average monthly capital turnover of around **11x**, meaning one dollar on the platform supports **\$11** in payment monthly volume. That's a massive jump from the **1-2x** annualized turnover typical of legacy money transfer operators.

"Stablecoin rails unlock dramatically higher capital turnover by eliminating idle capital and batch settlement delays. Legacy models force clients to over-provision for liquidity, leaving millions sitting unused in nostro accounts. With T+Now capabilities, that same capital can cycle through 5-10x more volume because it's deployed exactly when needed and recycled instantly after settlement."

— Nkiru Uwaje, Co-Founder and COO of MANSA

MANSA's Monthly Capital Turnover



Source: Mansa, Keyrock

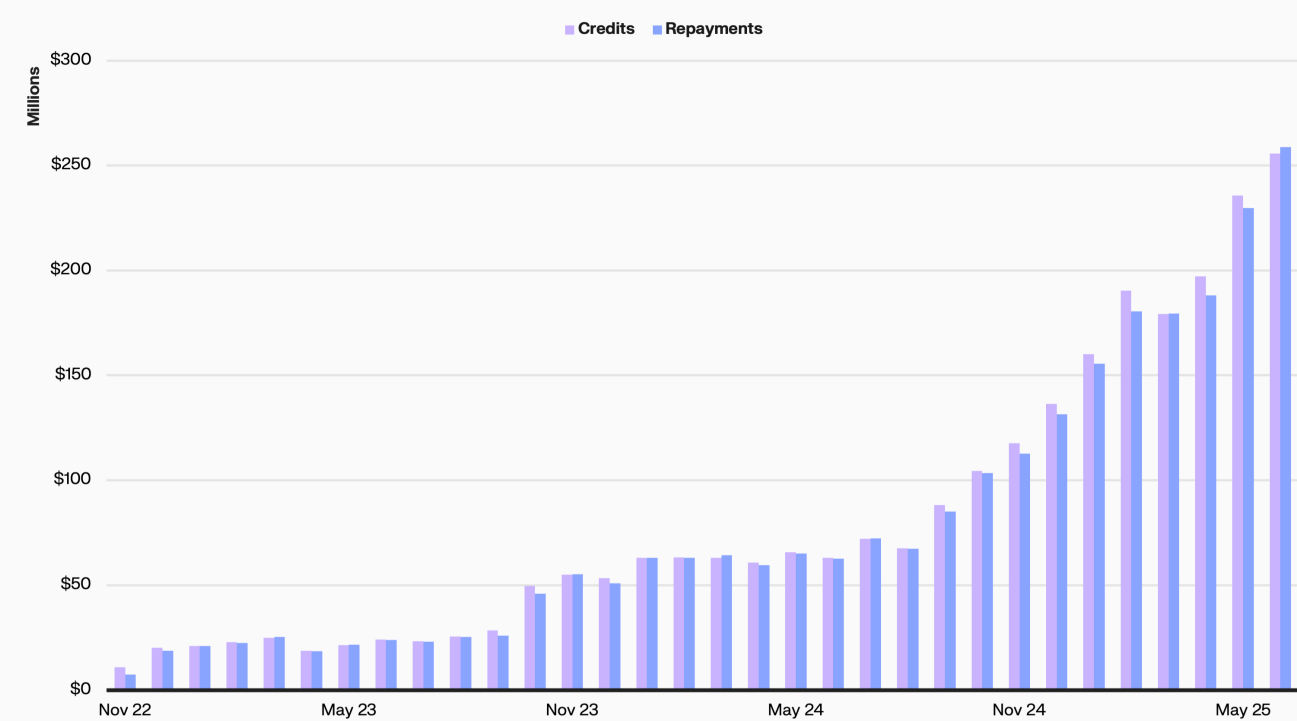
This high velocity comes from minimizing idle time. Funds are drawn, paid out onchain in minutes, then repaid when incoming fiat settles, often 1–3 days later. So the same capital is relent in rapid succession. Participants to date report zero credit defaults, with risk contained by short tenors and **real time underwriting** based on **transaction data** and expected **receivables**.²⁰

"Unlike legacy systems that rely on static, pre-estimated capital allocation, stablecoin rails let us scale liquidity in real time based on actual transaction volumes. This allows fintechs to operate near 100% capital utilization while still meeting liquidity needs. The result is a step-function improvement in ROA, fintechs can support more volume with less capital, or grow volume without increasing working capital requirements."

— Nkiru Uwaje, Co-Founder and COO of MANSA

Arf took a similar route by partnering with **Huma Finance** to draw from stablecoin liquidity pools. Arf's pool on Huma is now generating over **\$250 million in credit per month**. Small at market scale, but a clear signal of growing demand for receivables-backed onchain credit.

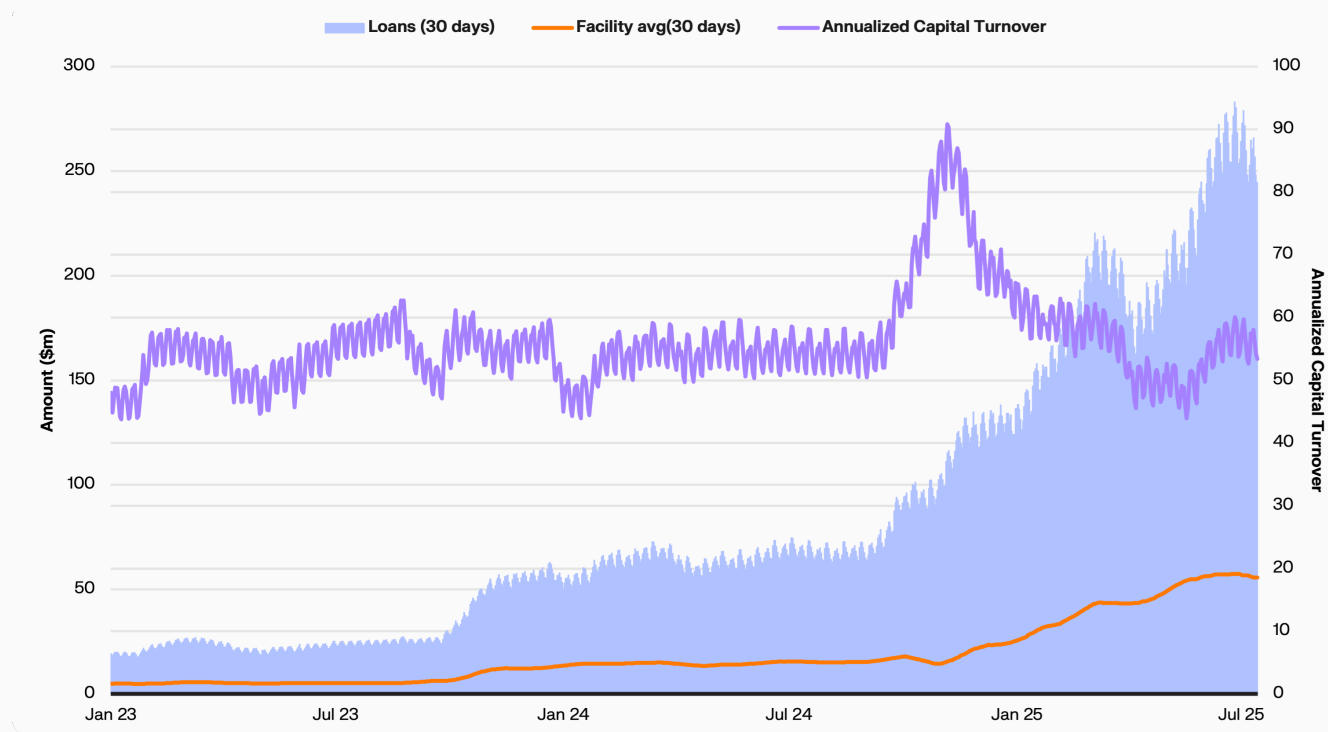
Arf & Huma’s Monthly Payment Financing and Refinancing



Source: Arf Financial, Keyrock

In late 2024, Arf showed it could scale its **loan portfolio without expanding its working capital**. From January 2024, it grew loan volume from **\$50 million to \$250 million**, a 400% increase, while maintaining an average annual capital turnover of **56x**. This highlights a key advantage over prefunding: **growth without balance sheet bloat**.

Arf's Capital Turnover is 50x Greater than Traditional MTOs



Source: Arf Financial, Keyrock

Unlike speculative yields tied to market cycles, these returns come from financing short-dated payment receivables tied to real commerce. Flows that persist through volatility. They solve a concrete problem as senders need working capital before fiat inflows clear. As stablecoin credit scales, **DeFi pools** broaden the capital base and route more of the spread to liquidity providers rather than intermediaries.

We believe **fintechs** will increasingly turn to **DeFi lending markets**. Onchain pools that allocate capital programmatically against receivables. Firms draw stablecoin liquidity on demand and auto repay as fiat settles, matching real-time payment needs while avoiding idle float.

This holds even as large funds become the primary holders of stablecoins. Those funds can supply the pools, and the venue still wins on neutral access, transparent data, programmable limits, and 24/7 settlement across corridors. Stablecoin credit networks turn liquidity management from a **static, high-cost model into a dynamic, just-in-time service**.

Instead of **parking \$100 million** across local accounts, a fintech keeps a thin buffer and taps pooled capacity, paying only for what it uses, when it needs it. Yields should compress as institutional capital scales, but the structural edge is the market design, not who supplies the capital.

5.3 The Clearinghouse That Never Sleeps

Stablecoin rails also rethink how netting and settlement work. Onchain, **the message is the settlement**. Tokens move instantly once the instruction is confirmed. This unlocks programmable netting methods that can exceed traditional systems in speed, access, and privacy.

For instance, multiple parties can use a smart contract to pool transfers and settle only the net difference. Each submits a **commitment** of what they owe, and the contract calculates net positions, triggering just the necessary stablecoin movements. Because this runs on a network, any fintech or bank can participate, and no central bank is needed.

With **zero-knowledge proofs**, participants can keep their payment details private while proving to the smart contract that their net position is accurate and within limits. This allows untrusted parties to net payments securely, unlike today's systems, where a central bank sees every transaction.

"Stablecoins are transforming into a real-time strategic engine. Liquidity becomes 24/7, cash can be deployed instantly, and currency exposure can be hedged natively onchain. What used to take days now happens continuously, programmable, transparent, and globally accessible. It's a fundamental evolution in how finance is managed."

— Caio Barbosa, Founder of Lumx

Blockchain netting isn't limited to end-of-day. It can run **continuously or trigger on demand** (e.g. every 300 transactions). This flexibility cuts intraday credit risk and speeds up fund turnover. Compared to today's clearing houses, stablecoin-based netting works like an **always-on wheel**, constantly balancing flows.

Netting rules on stablecoin rails are **transparent and programmable**. Participants can review the smart contract code to understand how net positions are calculated and what the settlement guarantees are. This contrasts with legacy systems where banks must trust the clearinghouse's opaque algorithms.

Stablecoin rails take a closed, opaque process and replace it with an open, secure protocol. Institutions don't need to build custom links to one another. Like email over the internet, everyone connects to the same shared network. This **universality** is the breakthrough.

6.

Proof in the Payments

6. Proof in the Payments

In **Section 5**, we explored how stablecoins offer a **internet-native** alternative to legacy systems like SWIFT, prefunding, and netting. But measuring the full impact of this new architecture means asking **where** it's actually gaining traction.

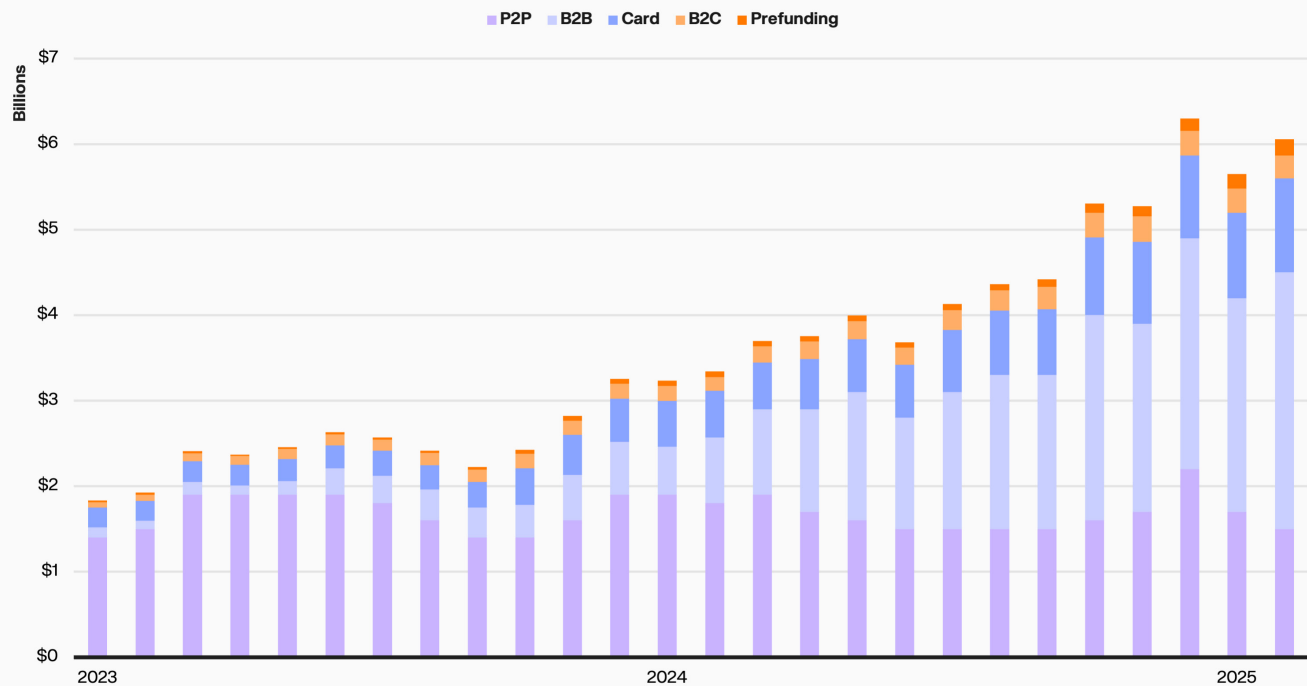
Stablecoin adoption has exploded, from just **\$4 billion** market cap in January 2020 to over **\$250 billion today**. They now settle more than **\$72.3 billion** in cross-border payments annually, a small but growing slice of the **\$7.4 trillion** in total stablecoin transaction volume.^{21, 22} While these figures still represent just **1%** of total stablecoin activity (with the rest primarily trading & liquidity flows), they mark a growing shift from speculative flows to **real economic utility**.

Stablecoins have long been foundational to crypto markets, but their role in real-world payments is just **beginning**. Between January 2023 and February 2025, just **\$92.4 billion** in stablecoin payments were attributable to identifiable transaction types (P2P, B2B, B2C, card, and prefunding). That figure is small relative to overall payments volume, but growing fast, and becoming more telling.

"We're still in the early stages of understanding what stablecoins can unlock in payments. They're open standards, banks can issue their own or adopt existing ones, and because they all operate on interoperable blockchains, there's room for flexible innovation. Instead of change being driven top-down by a single player or legacy consortium, stablecoins allow banks themselves to drive disruption from the bottom up."

— Kirill Gertman, CEO and Founder of Conduit

Stablecoin Payments Have More than Doubled in Just Two Years



Source: Artemis, Keyrock

The data reveals a clear turning point in late 2023. **B2B and card-based** stablecoin usage surged, pushing **total monthly payments** from under **\$2 billion** to over **\$6.3 billion** by February 2025. Monthly B2B payments grew from just \$120 million in January 2023 to over \$2.7 billion by February 2025, a **staggering +2,400% increase**.

Card-based stablecoin transactions also saw a +375% surge over the same period, rising from \$231 million to nearly \$1.1 billion per month. Meanwhile, **P2P** stablecoin payments made up the majority of transaction volume in early 2023 but have since declined, with B2B now accounting for the largest share.

This shift is reflected in how global finance leaders view stablecoins. **Ripple’s Stablecoin Trends in Business and Beyond report** found that global leaders see the greatest impact in vendor/supplier payments (56%) and consumer-to-business payments (55%), with treasury management (30%) also emerging as a key area of transformation.



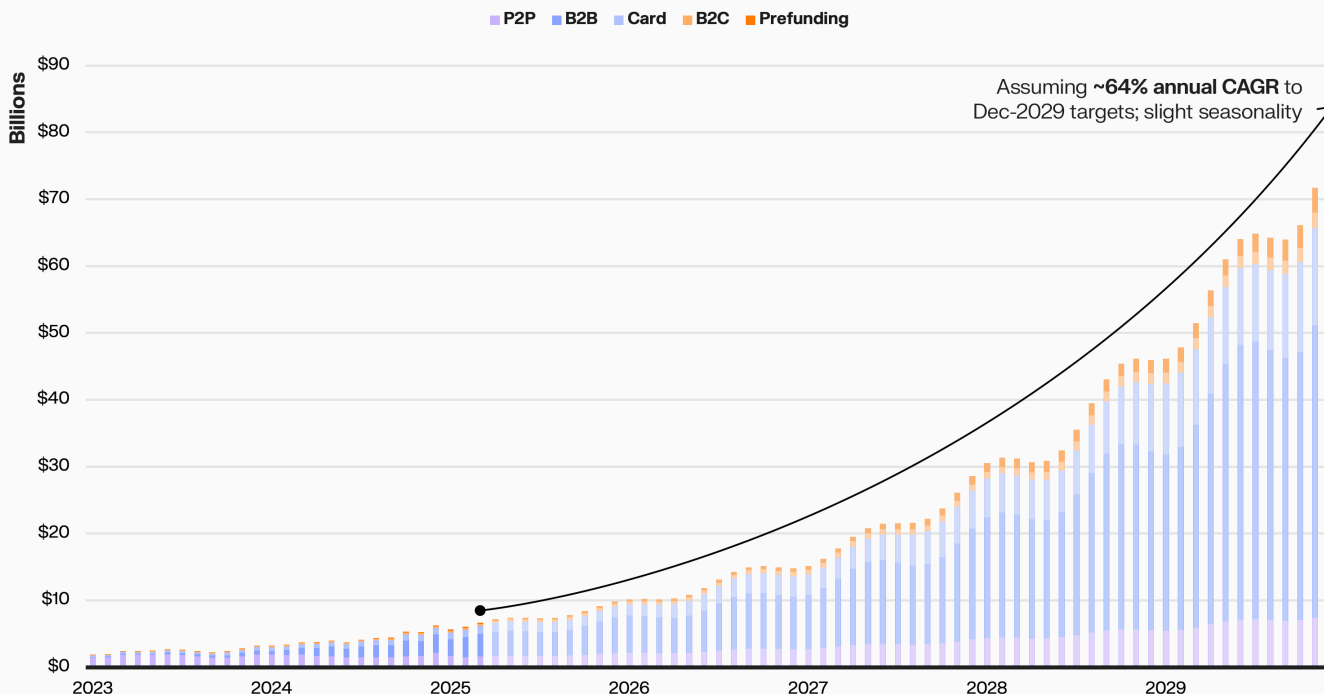
Source: Ripple

“Stablecoins are reinventing how value moves and new use cases are emerging every day. Beyond cross-border payments, we see major opportunities in global payroll, FX, trade finance, and digital entertainment. In 2025, we expect especially strong growth in remittances, gaming, import/export, and companies scaling into emerging markets.”

— Ben Reid, Head of Stablecoins at Bitso Business

If current growth trends hold, annual stablecoin payment volume across P2P, B2B, B2C, and Cards will approach **\$1 trillion by 2030**, driven by exponential growth in institutional use cases like B2B, P2P, and Card payments. What began as a peer-to-peer money transfer tool is rapidly evolving into a global settlement layer for fintechs, merchants, and payment providers.

The \$1 Trillion Opportunity

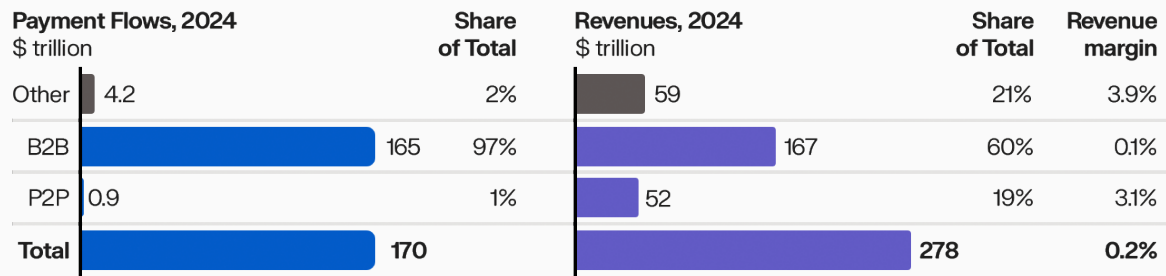


Source: Artemis, Keyrock

This section focuses on the three largest sectors driving real-world stablecoin payment adoption: **business-to-business (B2B)**, **peer-to-peer (P2P)**, and **card-based transactions**. These categories offer the **clearest** view into how stablecoins are migrating from crypto-native flows to more mainstream payment activity.

We close the section with **Onchain FX**. While it remains the least developed in terms of adoption, it addresses one of the most foundational frictions in cross-border payments: **currency conversion**. Onchain FX reimagines this layer from first principles. Though still early, this frontier holds the potential to fundamentally **rewire** how money moves across currencies and borders.

6.1 The Treasury Turnaround, B2B



Source: McKinsey

B2B payments are financial transactions companies make to external parties, including suppliers, vendors, government agencies, and individuals. By 2027, the average mid-sized company is projected to make over **1,400 domestic payments annually**, underscoring the operational load these systems carry.²³

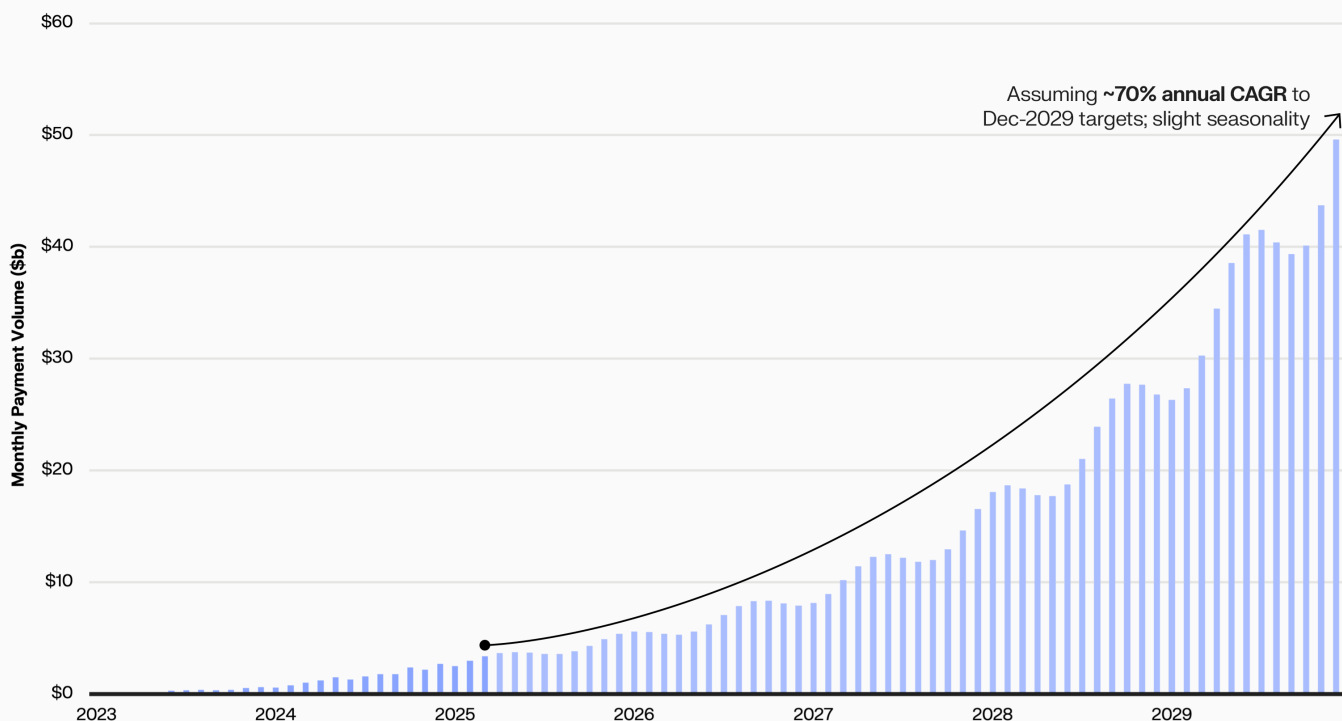
While B2B stablecoin adoption is still early, it already represents about **\$36 billion annually**, only ~0.02% of global payments, yet accounting for **~50% of current stablecoin payment flows**.²⁴

For many businesses, the most immediate impact of stablecoins is being felt in their own back office. Treasury functions, long constrained by fragmented balances, liquidity shortfalls, and opaque yield structures, are being rebuilt. This section explores how stablecoins are transforming two critical B2B payment categories: **treasury operations and supplier settlement**.

“When we launched Bitso in 2014, crypto was still experimental. Bitcoin traded below \$1,000, Ethereum didn’t exist yet, and few believed in the space. Fast forward to today, Bitso is Latin America’s leading crypto-powered financial platform. Our B2B arm, Bitso Business, has become a trusted payments infrastructure partner for over 1,900 institutions. With more than a decade of LATAM expertise, we help businesses send, receive, and convert local currencies through blockchain rails, faster, cheaper, and with full regulatory coverage”

— Daniel Vogel, CEO and Co-Founder of Bitso

Stablecoin B2B Volumes Set to Surge 17x to \$50b



Source: Artemis, Keyrock

Despite decades of optimization, B2B payments remain expensive. Companies still face **\$14 to \$150 in fees by intermediary banks and FX conversions per \$1,000 transferred**, while allocating around **32 cents for every \$1,000 of revenue to treasury functions**.^{25, 26} These costs represent just one component of broader treasury expenses.

These costs persist in part because most payment operations (**98%** of them) are still **manual**.²⁷ Paper checks still make up **31%** of payments, taking up to three weeks to clear and costing \$13–\$40 per transaction.²⁸

“From the B2B side, the appetite for stablecoin payments is strong. What’s holding them back isn’t the tech, it’s the lack of regulatory clarity. Businesses need a clear framework that tells them what’s compliant and what’s not. Add to that the need for bulletproof security, something that gives enterprises the confidence to transition from legacy systems to blockchain-backed solutions.”

— Caio Barbosa, Founder of Lumx

Meanwhile, stablecoins automate **core treasury functions** (escrow, conditional transfers, and invoice settlement) replacing the industry's **59-day average DSO**, where 1 in 5 firms still wait over 90 days to get paid.²⁹ They also enable wallet orchestration with **real-time ERP syncs**, slashing labor and reconciliation costs. **Compliance tools** (OFAC, KYB/KYT, travel rule) can be embedded directly into payment flows, while governance is enforced via smart contracts with **programmable roles, locks, and velocity limits**.

	Stablecoin-based B2B	Traditional B2B
FX	Convert at mid-market and settle instantly on both sides (simultaneous PvP for EM pairs)	Hidden spreads between the “real” exchange rate and what you’re actually charged.
Automation	Programmable	Fragmented workflows
Compliance	In-flow, automated compliance	Manual , siloed compliance
Treasury Management	24/7 auto-sweeps: tokenized T-bills/MMFs ↔ stablecoin (minutes)	Sell MMF/T-bills + wire (cut-offs): 1–5 days.
Supplier Payments	Approve → settle in minutes (auto-reconciled)	Batch wires, cut-offs; T+1–T+5, manual recon
Audit & Reporting	Real-time audit trail	Batch audits, limited granularity
Fund Management	Unified wallet connectivity (one API across providers).	Paper checks still make up ~31% of corporate payments globally
Control & Governance	Granular policy engine (roles, locks, velocity limits)	Basic controls via banking permissions
Ledger	Real-time reconciliations with ERP or general ledger	High labor costs due to manual reconciliation processes

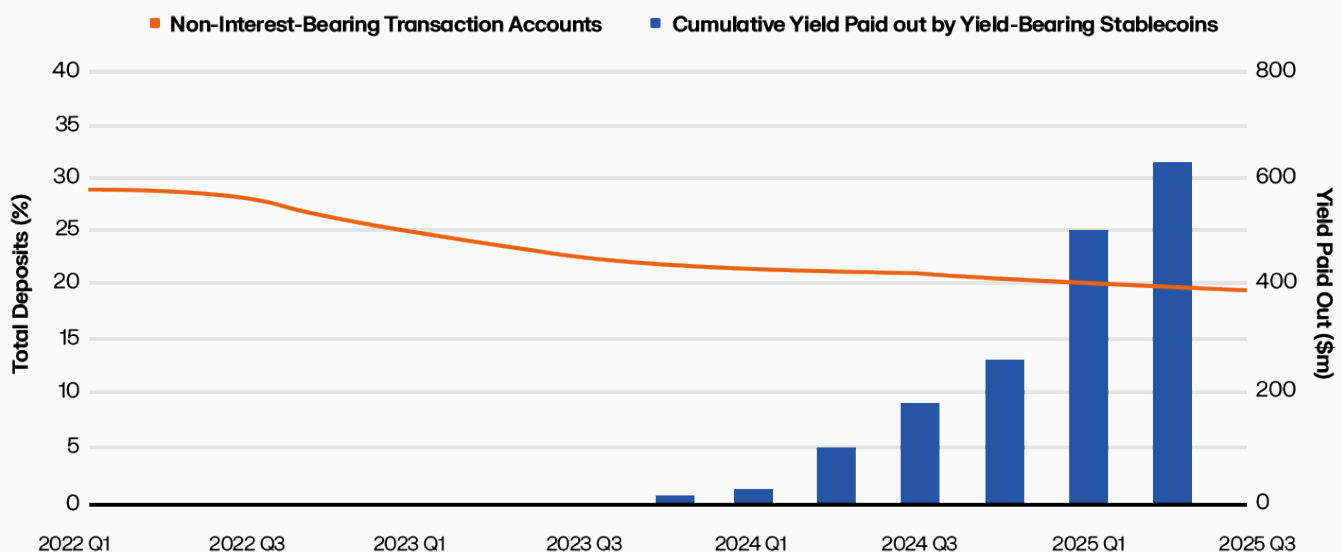
6.1.1 Real-Time Treasury Management

Corporate treasury is one of the clearest areas where stablecoins offer an immediate advantage.

Multinational firms often juggle **fragmented balances** across dozens of accounts, currencies, and legal entities, **restricting yield opportunities** and **tying up working capital**. Many also face cash pooling burdens and the risk of holding **illiquid emerging-market currencies**.

Meanwhile, fintechs and SMEs collectively pool billions in customer deposits yet pass on none of the yield. As shown below, **21%** of U.S. commercial deposits (**\$3.85 trillion**) earn no interest at all, giving banks a free spread on capital they don't compensate for.³⁰ At a 4% savings rate, that's **\$154 billion** in potential yield going to banks. This legacy model disproportionately benefits financial institutions, not the businesses fueling them.

Idle Cash to Yield



Source: Stablewatch

The stablecoin model flips this. Businesses can hold **reserves in yield-bearing stablecoins** (e.g., tokenized T-bills or money market funds), collect that yield automatically, and use those same tokens for disbursements, payroll, or supplier settlement. No batch cycles, no cutoff windows. Over time, we believe these balances will shift into stablecoins to capture yield until traditional finance institutions offer yield on stablecoin balances. More than **\$600m** has already been distributed directly through yield-bearing stablecoins.

Even large corporations are taking note. At its investor day, **Sony** revealed plans to issue an internal stablecoin to facilitate intragroup payments, while capturing yield on idle treasury balances. The logic is simple: if email works globally in real time, why shouldn't money?

This benefit is already playing out in volatile FX environments. In Colombia, where the peso dropped below \$900 per \$1 during recent currency swings, **OpenYield's** platform enabled users to hold USDC and earn yield on real-world assets, generating up to **6% APR**, compared to just **0.4% returns** on dollar accounts from local banks. **The chart below** illustrates how \$1,000 in pesos lost significant value while \$1,000 in USDC held on Open Yield + Littio would have preserved purchasing power and accrued yield.

Protecting Purchasing Power



Source: Conduit

6.1.2 Supplier Settlement

Beyond treasury optimisation, stablecoin rails are unlocking real gains in **supplier settlement**, particularly for import/export businesses, logistics firms, and SMEs that routinely deal with foreign partners. These firms are often exposed to **FX volatility, bank fees, and settlement delays**.

Stablecoins simplify this to a direct peer-to-peer settlement format:

1. Payers send USDC (or any stablecoin)
2. Receivers cash out locally via exchanges, on/off-ramp APIs, or banking partners.
3. There's no need for the payer to maintain a local account in the supplier's country, nor to prefund a nostro account in advance.

Conduit exemplifies the B2B infrastructure development by connecting domestic payment rails to a unified onchain payments layer. The platform processes payments across stablecoins and local currencies with reported costs up to **22%** lower than traditional alternatives. Brazilian businesses settling payments in Euros achieve settlement times over **500x** faster, saving thousands of hours of transaction settlement time annually.

"At Conduit, we see stablecoins as driving a generational change in cross-border payments that could displace SWIFT. We're already seeing it work at scale. With our partner Braza in Brazil, we enable Brazilian Real to be minted into a stablecoin, swapped in real time for USD or EUR-backed stablecoins, and settled within minutes, replacing what used to take days."

— Kirill Gertman, CEO and Founder of Conduit

For finance teams managing cross-border operations, the value proposition is clear: instant settlement, transparent pricing, and programmable money at a fraction of traditional costs. The question for businesses is no longer whether to integrate stablecoin rails, but how quickly they can implement them to maintain competitive advantage in an increasingly digital-first global economy.

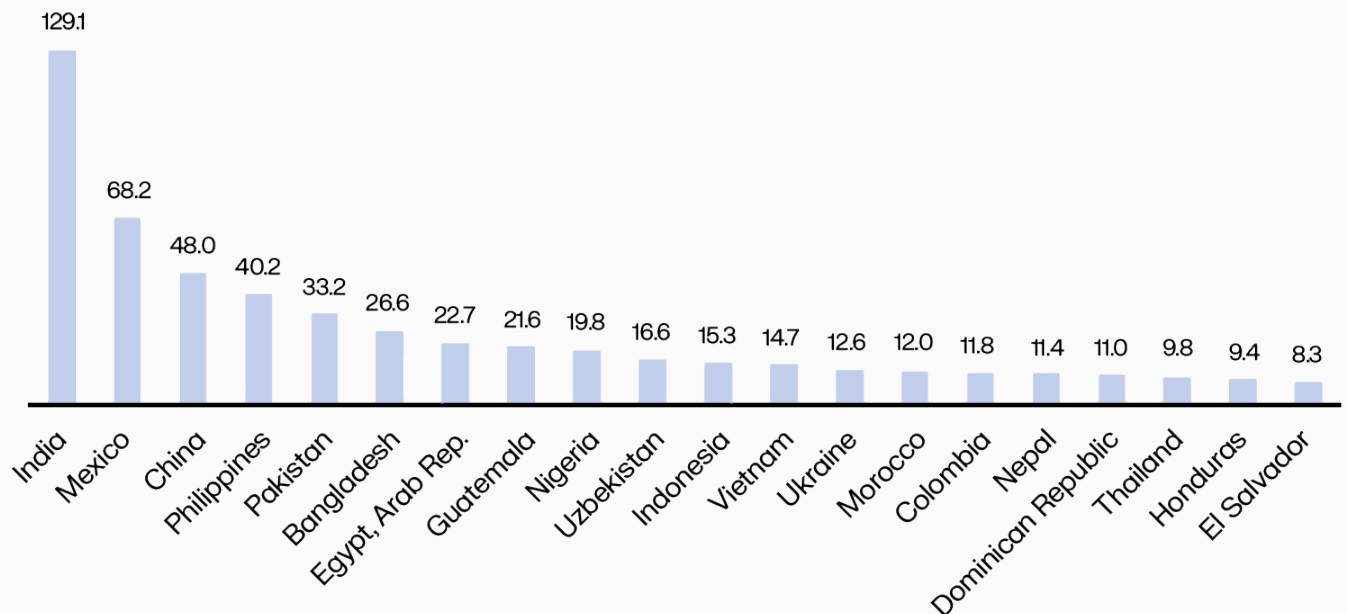
6.2 Money That Finds a Way, P2P

Stablecoin rails also transform **person-to-person (P2P) transactions**. These include cross-border transfers for family support, education, or emergencies, most notably remittances. In 2024, low- and middle-income regions collectively received about \$685 billion in remittances. **South Asia** (\$207b), **Latin America** (\$163b), and **East Asia & Pacific** (\$136b) were the largest recipients.

"We're not targeting the U.S. It's crowded, expensive, and saturated with players. Instead, we're focused on emerging markets, like Latin America, Southeast Asia, parts of Africa, where crypto has real utility beyond speculation. That's where Gnosis Pay can make the biggest difference."

— Stefan George, Co-Founder of Gnosis Pay

Top Recipients of Remittances among Low- and Middle- Income Countries in Volume (2024)



Source: World Bank

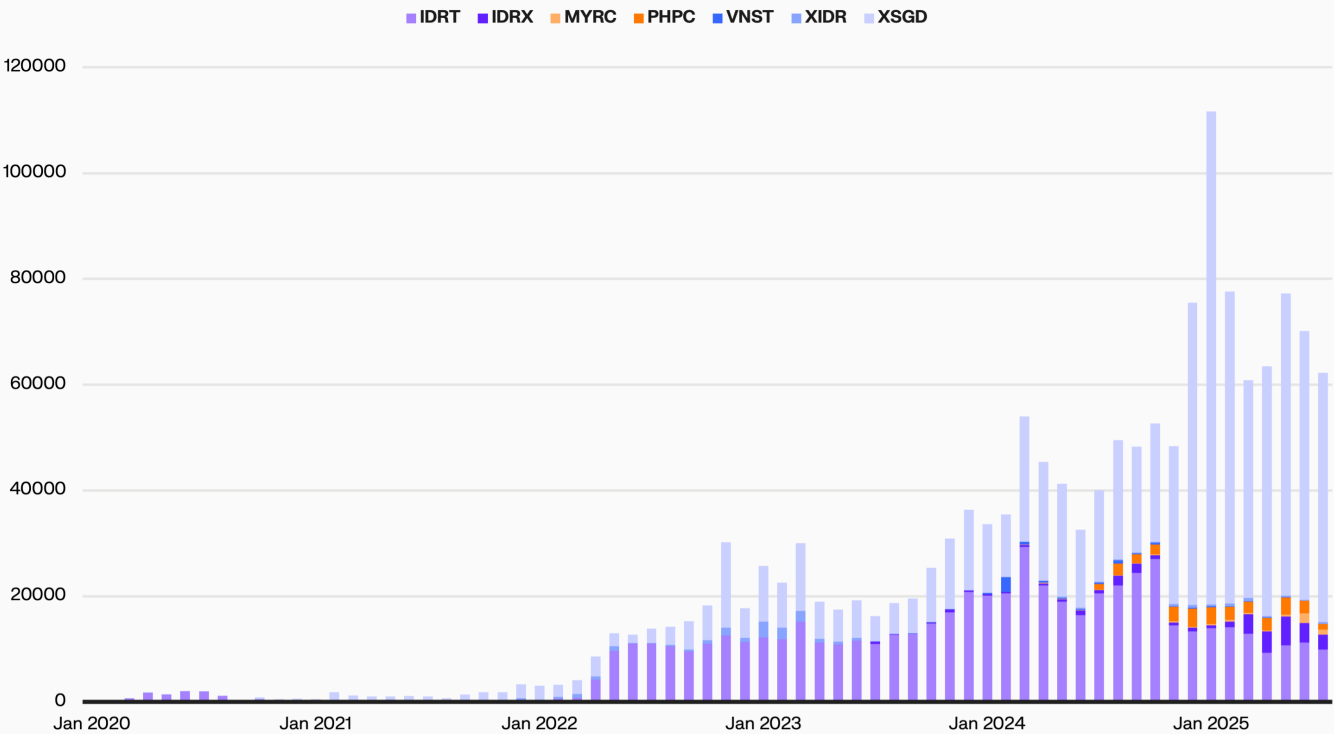
While remittance inflows measure in the hundreds of billions annually, stablecoin activity in these corridors is still in early stages, but rising fast. The dashboard below tracks monthly transaction counts across key Southeast Asian stablecoins such as **XSGD (Singapore), XIDR (Indonesia), and VNST (Vietnam)**, spanning multiple chains.

Despite transaction volumes remaining orders of magnitude below traditional remittance flows, the steady **month-over-month growth** from **2,920 transactions** in January 2022 to **~70,000 transactions** in June 2025 points to increasing adoption.

“In the past, moving from USD to a long-tail currency involved multiple intermediaries and days of delay. Now, you can swap FDUSD to PHP or IDR instantly with better transparency and lower cost. That unlocks massive efficiency for payment companies.”

— Devere Bryan, General Manager of First Digital

SE Asia Stablecoin Transactions Have Surged 24x Since 2022



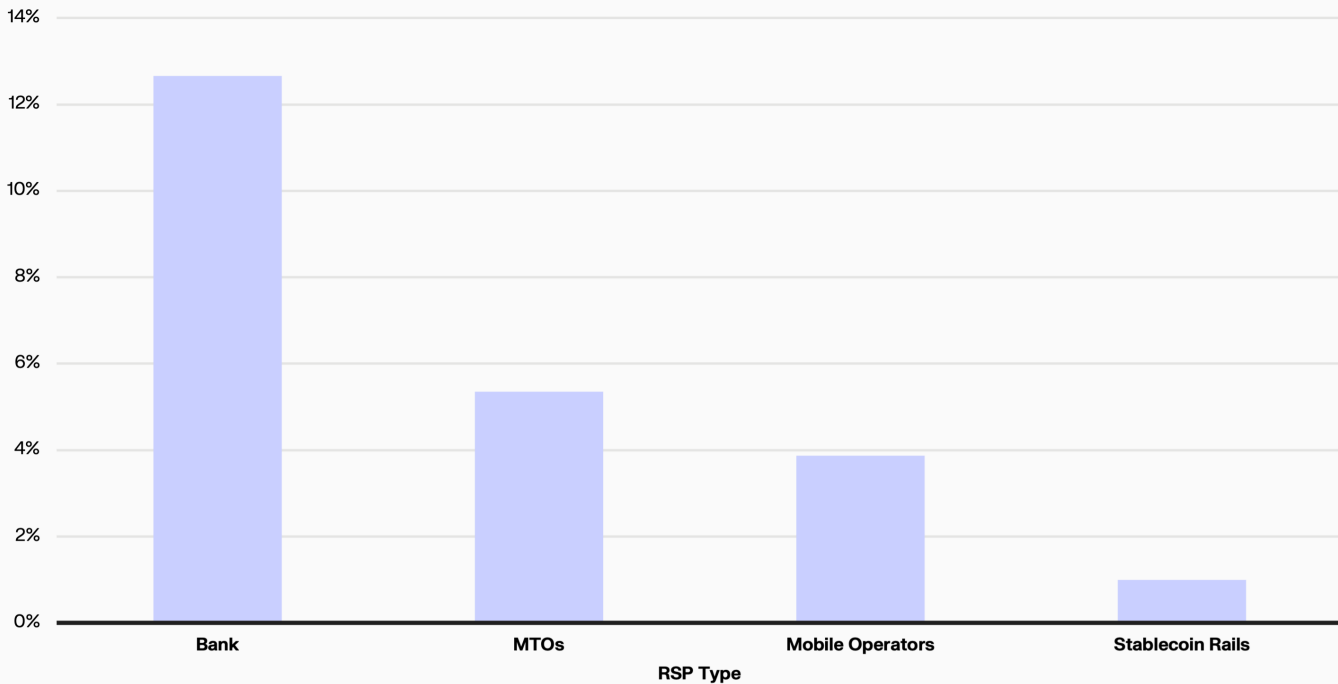
Source: Mou_raf, Keyrock

Because remittance costs remain high, **local stablecoins** are likely to see continued growth, not just as a workaround for expensive remittance rails, but as a practical tool for **spending in local currency**. While many users may prefer to receive funds in U.S. dollars, day-to-day expenses still happen in pesos or rupiah. Stablecoins denominated in local currency bridge that gap. As stablecoin rails continue to get built out, with better liquidity, integrations, and off-ramp access, local stablecoins are expected to accelerate.

On average, **sending \$200** costs roughly **6.3%** and **\$500** costs **4.3%**. These fees include **service charges** (by banks, Western Union, etc.) plus **currency exchange markups**. In practice, providers often offer worse than market exchange rates and keep the difference as profit. Across corridors, **FX markups** typically account for **~35%** of the cost, and in some emerging markets they can be as high as **80%**.³¹

The breakdown of remittance fees by provider underscores the inefficiency of traditional channels. For a **\$200 transfer**, **banks** charge the highest fees (~12.66%), while **money-transfer operators** (MTOs) charge **~5.35%** and **mobile carriers** **~3.87%**. By contrast, stablecoin platforms can dramatically undercut these rates. For example, the **Coinbase Developer Platform** USDC on-ramp/off-ramp charges **0%**, whereas other gateways (e.g. MoonPay) may charge up to **~4.5%**. With growing competition, these fees are trending downward.

Stablecoins Can Reduce Remittance Costs by ~92%

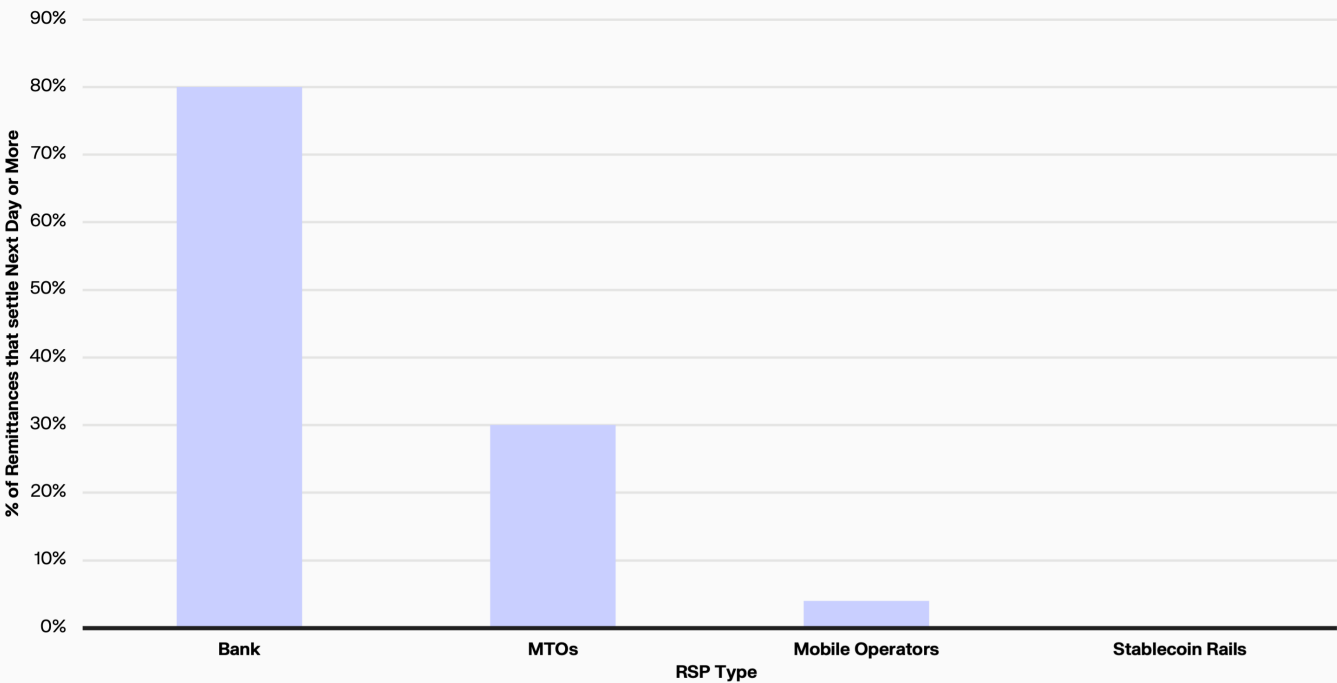


Source: World Bank

BCRemit (serving Filipino migrant workers) slashed its total transfer cost (fees + FX) to just over **1%**, while avoiding the liquidity shortfalls that force traditional providers to use costly short-term loans.

Similarly, **Sling Money** lets users fund “virtual accounts” and send money at real-time mid-market FX with no hidden markups, charging only up to **0.1%** on deposits while banks charge ~13% to send a \$200 transfer. Funds on Sling are converted to the **USDP** stablecoin and can then be sent globally in under a second for free.

Speed of Sending Remittances



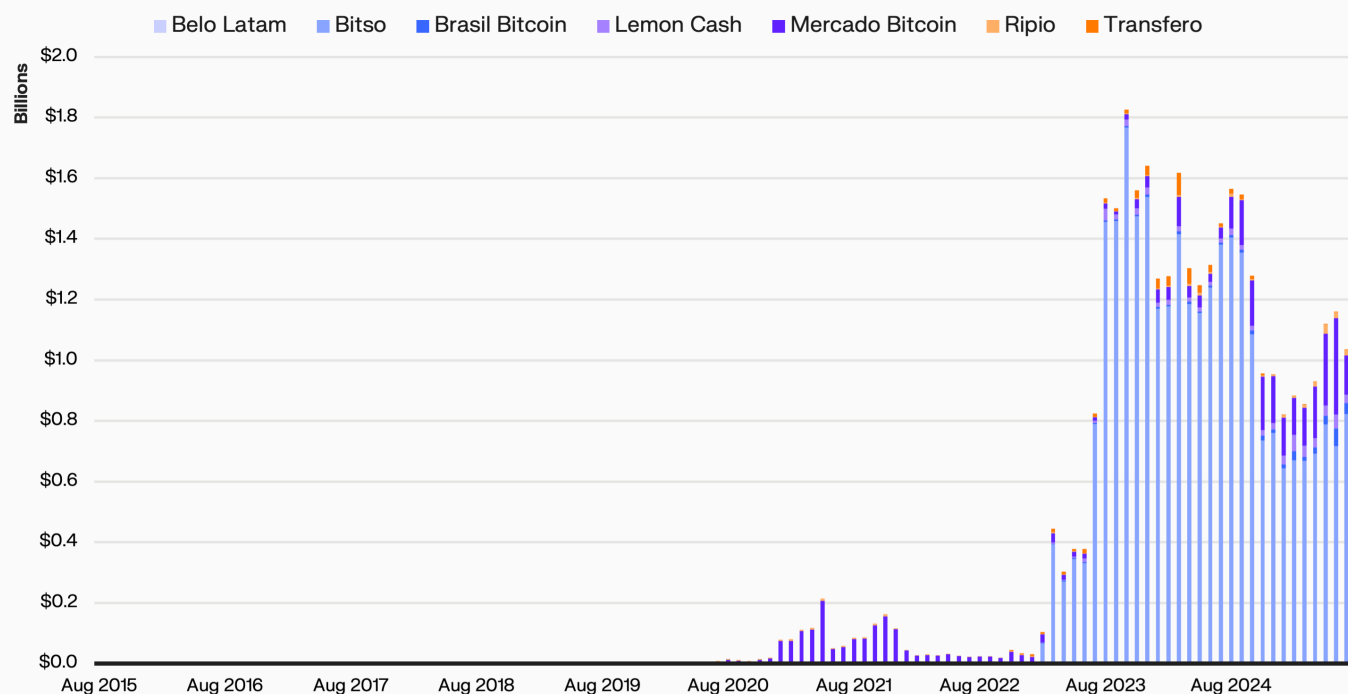
Source: World Bank

Stablecoin rails represent an order-of-magnitude improvement in remittance economics, being **4-13x** cheaper while providing near-instantaneous settlement compared to traditional methods that could take one to multiple days. This efficiency is already prompting incumbent players to adapt as legacy remittance firms like **M-Pesa** added regulated stablecoins (e.g. USDC) to their product suites.

“At Bitso, we’ve built our payment rails around emerging markets. We created MXNB, a peso-pegged stablecoin, and helped launch BRL1 in Brazil. In 2024 alone, Bitso Business processed over \$12b in cross-border payments. These products give our clients efficient access to local currencies, enabling global companies to serve LATAM markets with lower fees and faster settlement.”

— Imran Ahmad, General Manager at Bitso Business

Bitso Commands LATAM CEX Volumes



Source: Dune, Keyrock

Bitso, which handles over **10%** of remittance flows between the U.S. and Mexico (the world's largest corridor), now dominates **LATAM crypto exchange volumes**. Bitso processed nearly **\$850m** in July, around **6.5x** more than its closest rival. In a region where stablecoins made up **~39%** of all crypto purchases in 2024, Bitso's early bet on stablecoin-native infrastructure is paying off.

As the payments landscape evolves, **centralized exchanges** and crypto-native remittance providers are increasingly expanding into payments by launching payments apps (e.g. **Kraken's Krak**) and local stablecoins (e.g. Bitso's MXNB & BRL1). These stablecoins **serve as the destination**, not just the medium in the stablecoin sandwich model, allowing users to stay onchain without needing to withdraw to bank accounts.

Looking ahead, we expect more **exchanges and remittance platforms to issue regional stablecoins** and leverage their **internal liquidity** for swaps. In general, these players are shifting focus toward improving payments while keeping users onchain by offering yield on balances and branching into adjacent services like credit/debit cards (e.g. Coinbase One card).

“The stablecoin market today is almost entirely denominated in USD, but that won’t last. As tokenized payment use cases expand, we’ll see growing demand for domestic currency stablecoins. The future of tokenization is multipolar.”

— Harvey Li, Tokenization Insight Founder

This evolution sets the stage for our next topic: **stablecoin-linked payment cards**.

6.3 Stablecoin-linked Cards

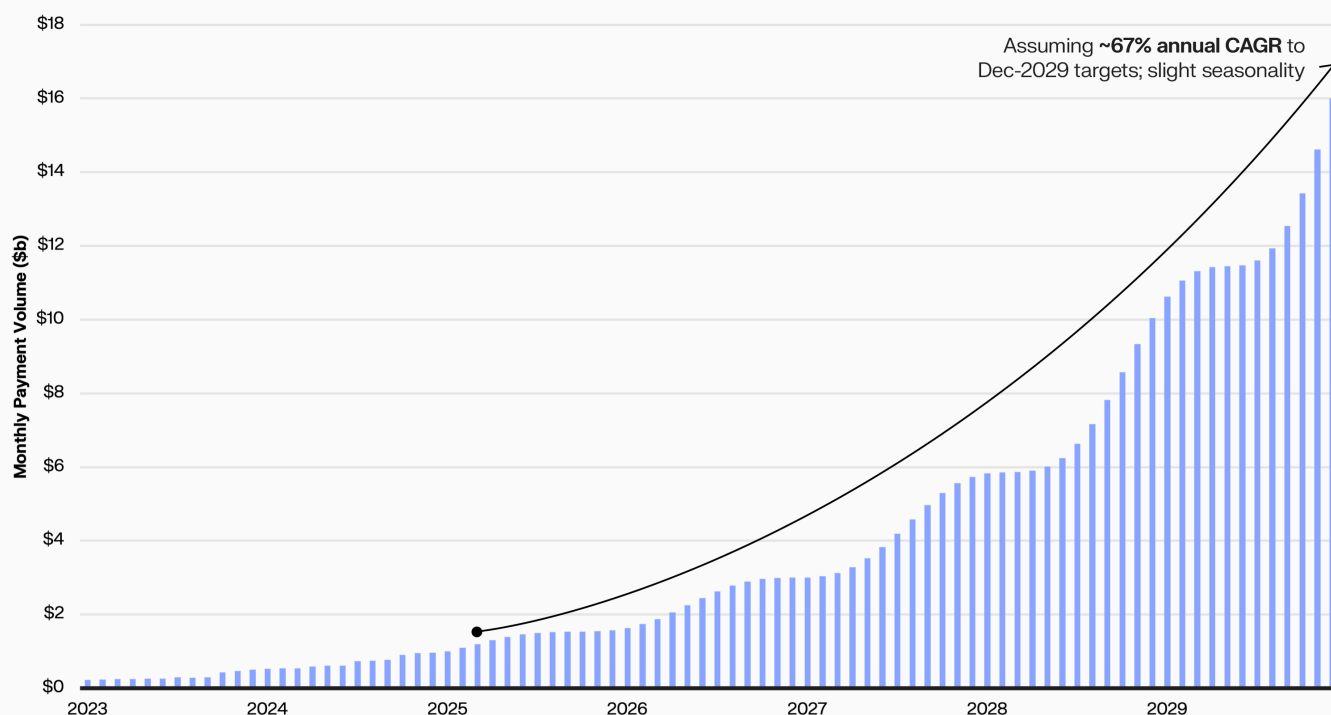
Stablecoin-linked credit and debit cards are among the most compelling real-world use cases. By combining the global reach of **Visa/Mastercard rails with blockchain’s programmability and transparency**, fintechs now enable consumers worldwide to pay tens of millions of merchants directly from their crypto or stablecoin balances.

Reflecting this momentum, **Artemis’ data shows** that stablecoin card payment volume (among tracked partners) grew from about \$250 million per month in early 2023 to over **\$1 billion per month** by early-2025.

“Crypto can’t be a compromise. It has to be better. More convenient, more flexible, more powerful. We’re already closer than we were a year ago, but to win, we have to integrate features like direct debit, SEPA transfers, and local alternatives to Visa and Mastercard. We need to blur the line so completely that users forget there ever was a line.”

— Stefan George, Co-Founder of Gnosis Pay

Stablecoin Monthly Card Volumes Set to Surge 15x to \$16b



Source: Artemis, Keyrock

Two key innovations are helping drive this shift. On the backend, stablecoins enable **tokenized receivables** that streamline card settlement and improve issuers' capital efficiency. On the frontend, users can now hold stablecoins on card rails, offering seamless **dollar access and usability**, even in dollar-constrained markets.

6.3.1 Tokenized Receivables

Traditionally, when you use a credit card, the **issuer** (e.g. Chase, Capital One) advances payment to the merchant, creating a **receivable** on its balance sheet. The issuer must then finance that receivable until the customer's repayment, often by selling batches of receivables to **warehouse lenders**. This legacy process involves heavy paperwork and coordination, and it typically imposes a **~2-week lag** between purchase and capital recovery. The result is significant working-capital inefficiency.

Rain, a stablecoin card-issuing platform, has disrupted this model by **fully tokenizing its Visa credit receivables**. In Rain's system, corporate clients deposit **USDC** (or another approved stablecoin) into a vault to **establish their credit limit**. At the end of each billing cycle, any outstanding balance is settled automatically through onchain liquidation.

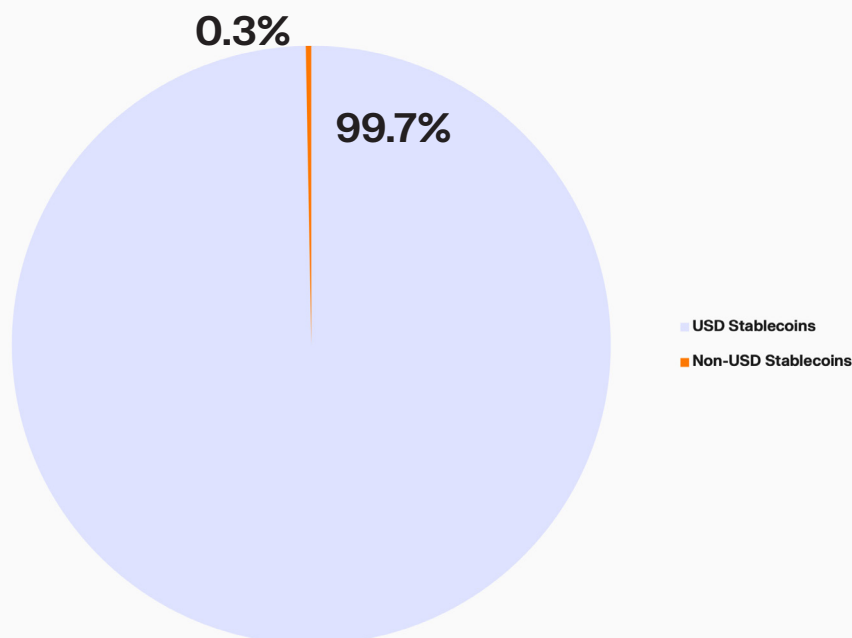
Moreover, Rain **tokenizes settlements on a per-swipe basis**. When a user spends on their card, Rain instantly **borrow**s the amount from a **lender** and **settles** the merchant immediately, onchain. This eliminates batching. **Every transaction immediately releases working capital**.

All repayments also flow onchain. When clients pay their bills, smart contracts automatically distribute **principal and interest to lenders**, removing any **fiat repayment risk**. Rain reports saving **roughly \$180,000 in legal and operational costs** annually thanks to this automation.³²

6.3.2 Dollar Access

Underlying consumer demand for these cards is the global need for reliable dollar access. **About 75% of USD resides outside the United States**, yet many regions lack stable access to dollars through local banks. In fact, a survey in Nigeria, Indonesia, Turkey, Brazil and India found **47% of respondents cited better dollar access as their primary motivation** for using stablecoins.³³

USD Stablecoins Dominate the Market



Source: RWA.xyz, Keyrock

Stablecoins act like a **global dollar correspondent** when linked to Visa/Mastercard. They provide both the stability of a dollar balance and the universal acceptance of major cards. Users holding stablecoin on a card can spend at any merchant and still retain the option to earn yield on their underlying balance.

The practical benefit is clear, since the remittance recipient often pays **two fees** when converting USD to local currency:

1. Workers in developed economies send salaries or remittances abroad.
2. Recipients receive funds in local currency, often facing high inflation and steep exchange fees due to less competitive banking markets.
3. Consequently, recipients **pay fees** when converting inbound USD to **local currency** and when **converting local currency back to USD** for international purchases (e.g. paying for Amazon cloud services).

"Localized stablecoins are part of the solution, not perfect, but necessary. Most people don't think in dollars; they think in their own currency because that's how they live and spend. Even in countries like Argentina, people still want some local exposure. And in places like Brazil, where the economy is relatively strong, local currencies are even outperforming the dollar. We shouldn't assume everyone wants to dollarize, there's more nuance than that."

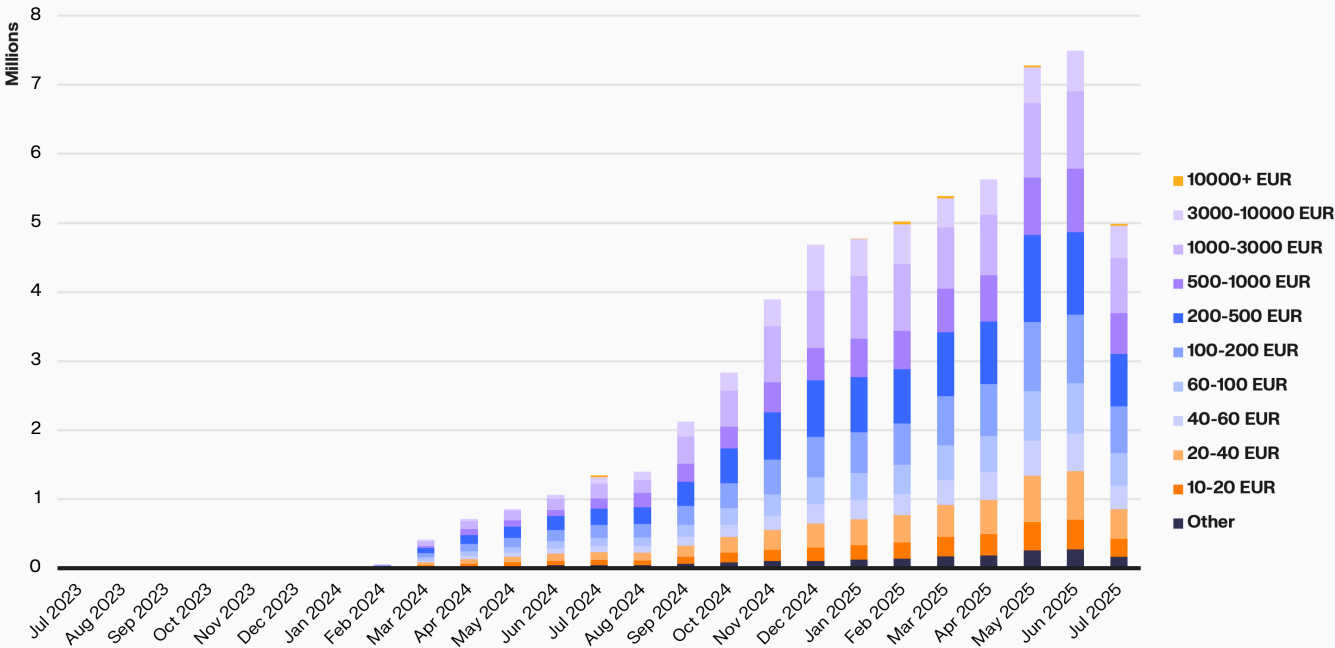
— Stefan George, Co-Founder of Gnosis Pay

Gnosis Pay, which links self-custodial wallets directly to Visa debit cards, is gaining momentum in both user growth and transaction volume. It enables users to spend stablecoins like USDC and EURE directly from their wallets, without routing funds through centralized intermediaries.

Spending behavior on the platform suggests growing engagement across a wide range of users. Transactions between **€200 and €500** make up the second most active tier, while the **€1,000 to €3,000** range sees the highest volume among power users.

A **57%** increase in monthly volume year-to-date through June further signals accelerating adoption. Users are not just joining the platform, they’re transacting more frequently and at higher values.

Gnosis Pay Users Are Spending More, and More Often

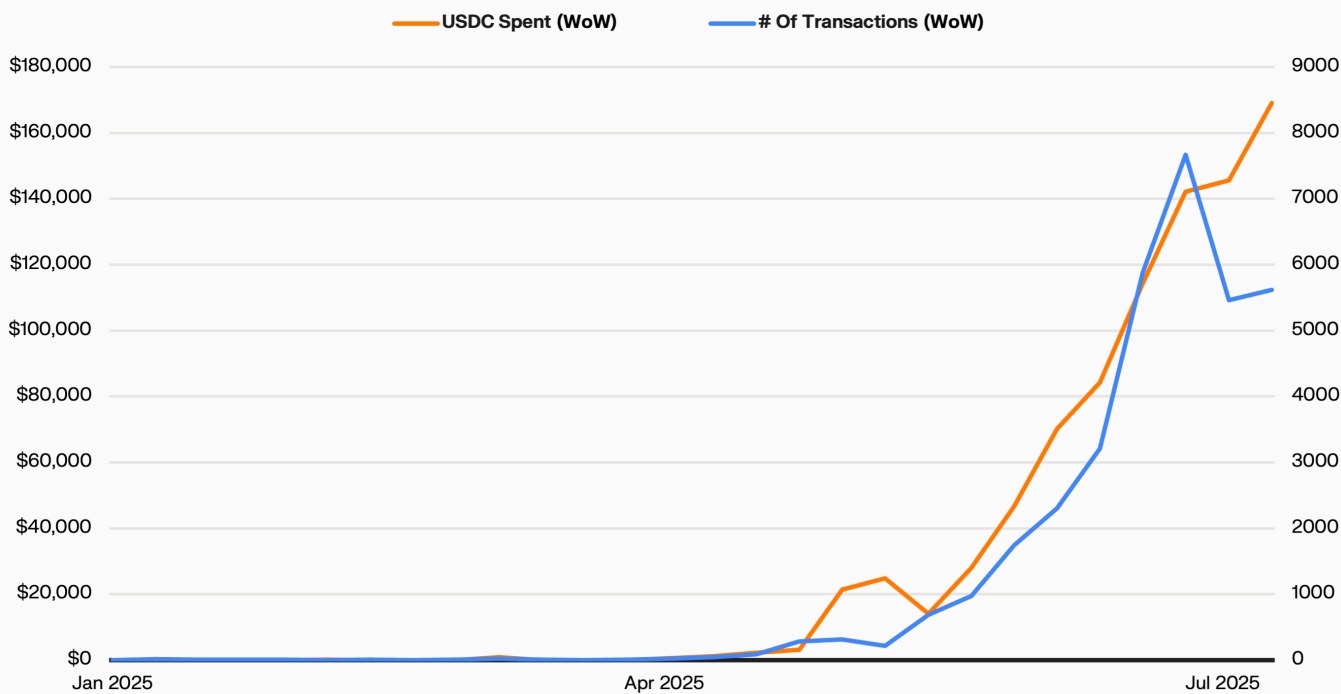


Source: @obchakevich, Keyrock

“Brazil has been a success story for us. A new tax was introduced there on fiat conversions to USD, but it didn’t apply to crypto rails. That kind of regulatory arbitrage opened the door to serve everyday users who don’t even care about crypto. They just want a better way to transact, and we can provide that.”

— Stefan George, Co-Founder of Gnosis Pay

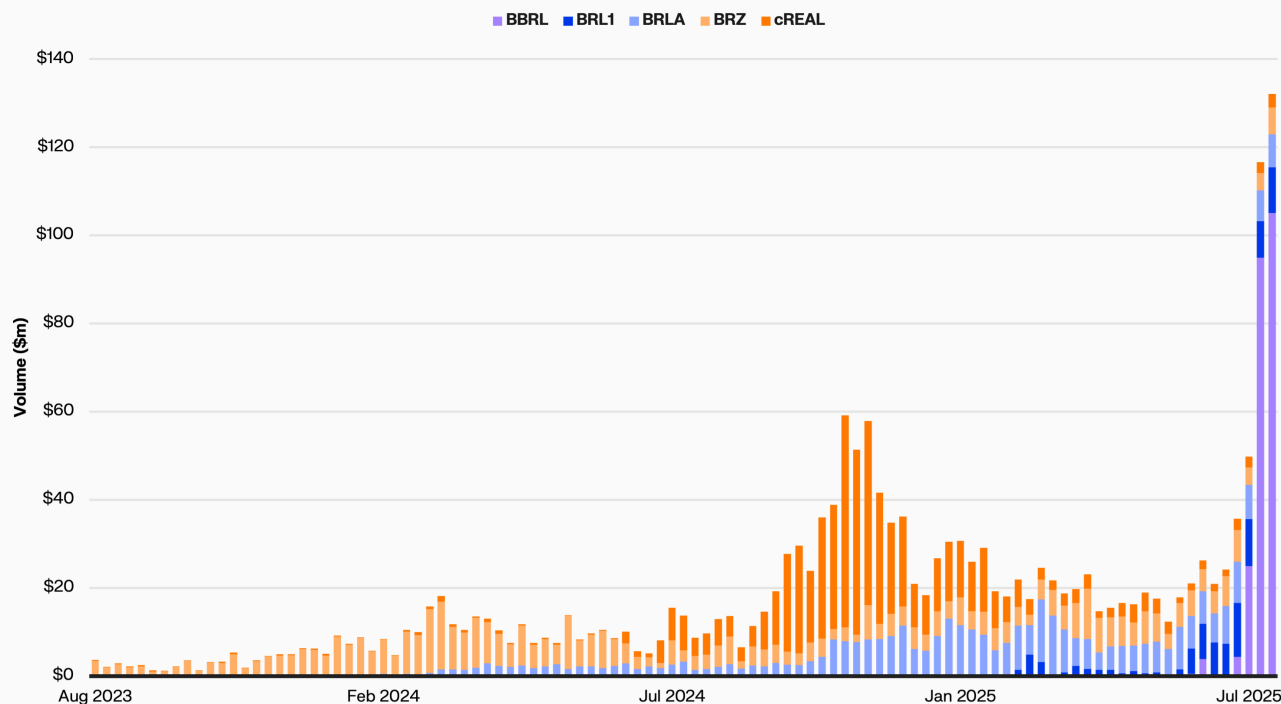
Gnosis Pay Volumes in Brazil are Soaring



Source: Picnic, Keyrock

Brazil has emerged as one of the most dynamic markets for stablecoin adoption, and Gnosis Pay is not alone in seeing this growth. Weekly transfers of Brazilian real-denominated stablecoins have grown from **\$5 million** in January 2024 to **\$132 million** by the end of July 2025, with **BBRL** (issued on XRPL) accounting for the vast majority at over \$105 million. BBRL is now the second-largest Brazilian stablecoin by market cap after Transfero Group’s BRZ.

BRL Stablecoin Volumes Up 26x Since January 2024



Source: r0dtr

The stablecoin-linked cards use case is straightforward. A remittance-receiving family can get fully-reserved U.S. payment stablecoins (in USDC) and spend them locally with familiar card rails at minimal cost. Likewise, a global contractor can be paid in stablecoins and use them wherever Visa/Mastercard is accepted. These capabilities (e.g. **stable value, global liquidity, and universal acceptance**) illustrate how stablecoin-linked cards deliver real-world utility.

6.4 Rewiring FX

While stablecoins solve many of the inefficiencies baked into legacy payment rails, most implementations still rely on offramps back into fiat, especially when foreign exchange is involved. The promise of stablecoins as a global value layer remains constrained by **fiat dependencies**. That's beginning to change. A new category of infrastructure is emerging that reimagines how FX works entirely: **Onchain FX**.

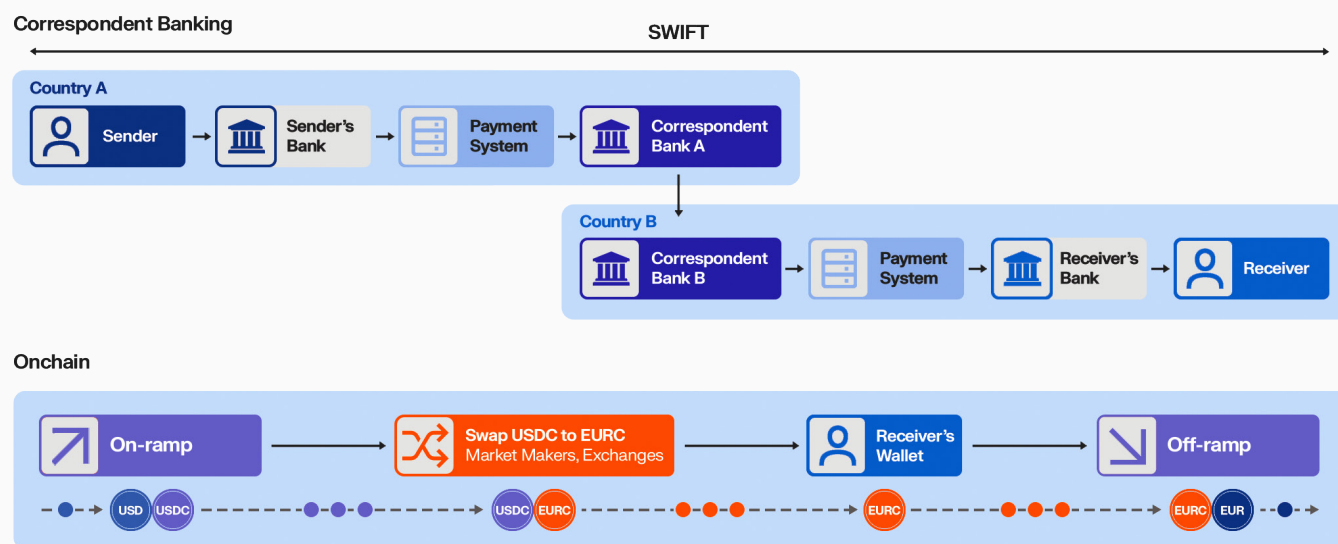
Onchain FX reimagines the traditional stack of correspondent banks, netting engines, and multi-step settlement layers with real-time, programmable swaps. The model is still early-stage, and while some critiques remain, many reflect growing pains rather than fundamental flaws.

“Stablecoin liquidity isn’t just about quoting tight spreads, it’s about managing the invisible plumbing behind them: bank rails, settlement lag, cutoff times, and jurisdiction-specific frictions. Our edge lies in mirroring banking operations internally, so we preempt rebalancing and move funds with surgical precision. You also can’t consistently hold top-of-book without direct access to primary issuance. We’ve built relationships with all major stablecoin issuers, enabling real-time minting, redemption, and arbitrage across venues and chains. Deep liquidity begins with deep infrastructure, and that’s where Keyrock leads.”

— Stef Wynendaele, Managing Director of Keyrock

Some stablecoin payment companies lack access to **wholesale FX rates**.³⁴ Leading solutions like Bridge have only recently gone live, underscoring how early the ecosystem remains.

As **asset tokenization** accelerates, FX is undergoing a structural overhaul. A landscape once defined by fragmented liquidity, opaque settlement, and currency incompatibility is being rebuilt into programmable, real-time rails. **Legacy currency swaps**, reliant on correspondent banks and multi-day settlement, are now being rearchitected from the ground up.



Source: Uniswap, Keyrock

Today’s FX system requires correspondent banks to maintain relationships across multiple national payment networks, each governed by **its own currency and central bank rules**. This fragmented model forces banks to hold accounts in numerous jurisdictions just to move money internationally.

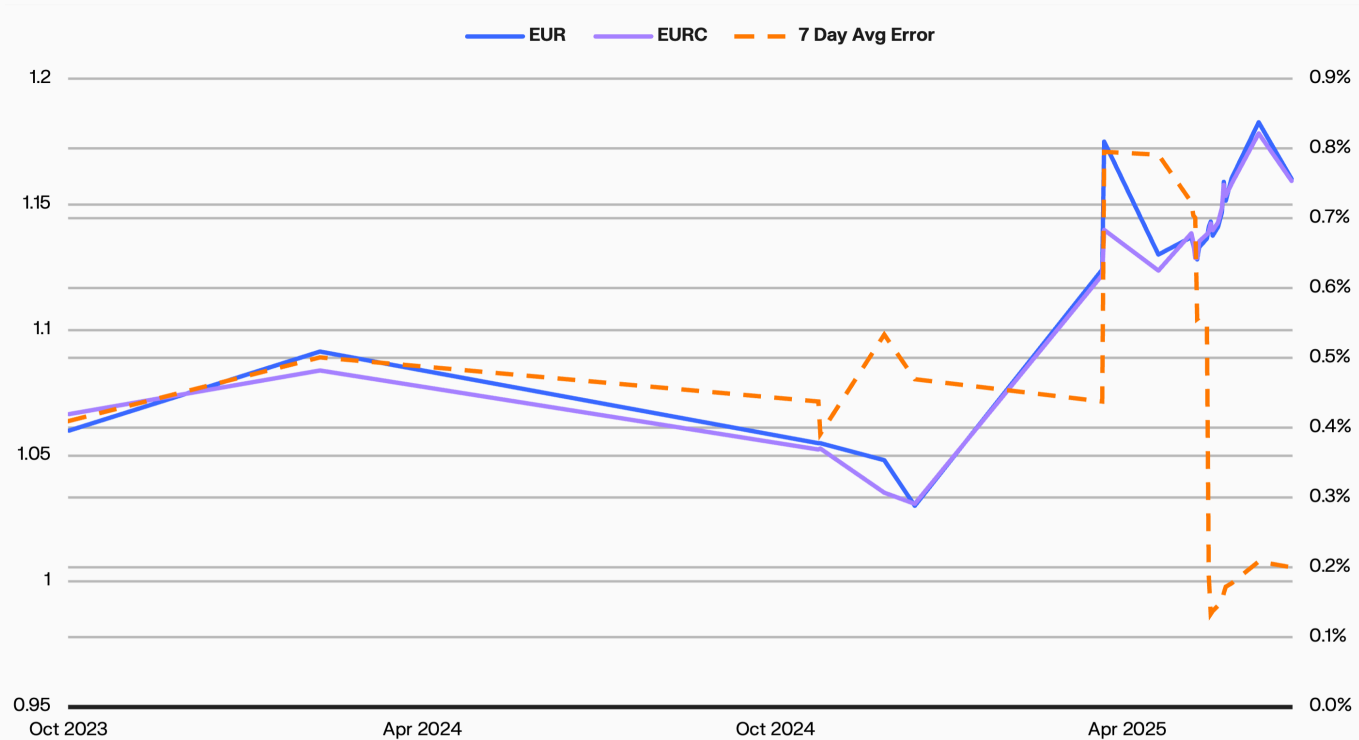
Onchain FX presents a fundamental alternative. Using blockchain, it enables **atomic Payment versus Payment (PvP) transactions**, ensuring that both legs of a trade settle simultaneously or not at all, eliminating counterparty credit risk. By combining **messaging and settlement into a single layer**, it also reduces operational complexity and error.

	Onchain FX	Traditional FX
Settlement	Instant or near-instant	T+1 to T+3 . Can be longer if it extends into holidays or weekends
Settlement Risks	Minimal, atomic PvP	~1/3 of deliverable FX trades face settlement risk (\$2.2T)
Hours	24/7	Limited to banking hours and regional cutoffs
Transparency	Fully transparent , onchain	Opaque pricing and execution ; no real-time visibility into routing or fees
Liquidity	Aggregated via AMM composability	Deep for majors, but limited and fragmented in EM pairs due to bank flows
Spread	~22-50 bps ; Lowers with time as more currencies go onchain – <i>*with sufficient liquidity</i>	~40-100 bps for EM pairs
Prefunding	\$0	6-13 bps
Fees	<\$0.01	5-20 bps
Operational Risk	Offchain dependencies and smart contract vulnerabilities	Settlement delays, FX volatility, stale quotes: 5-15 bps
Regulatory Risk	1-5 bps	KYC/AML, sanctions screening, reporting, audit overhead: 3-10 bps

Source: Uniswap, Keyrock

Data from **EURC-USDC** swaps on Ethereum demonstrates **onchain FX's improving efficiency**. Analysis of Ethereum-based swaps shows the median price deviation from **Chainlink** oracle rates has tightened significantly over time, with 7-day rolling average absolute errors trending toward **sub-0.5% levels**. This represents meaningful progress in price discovery efficiency.

Daily EURC Swaps



Source: Steakhouse, Keyrock

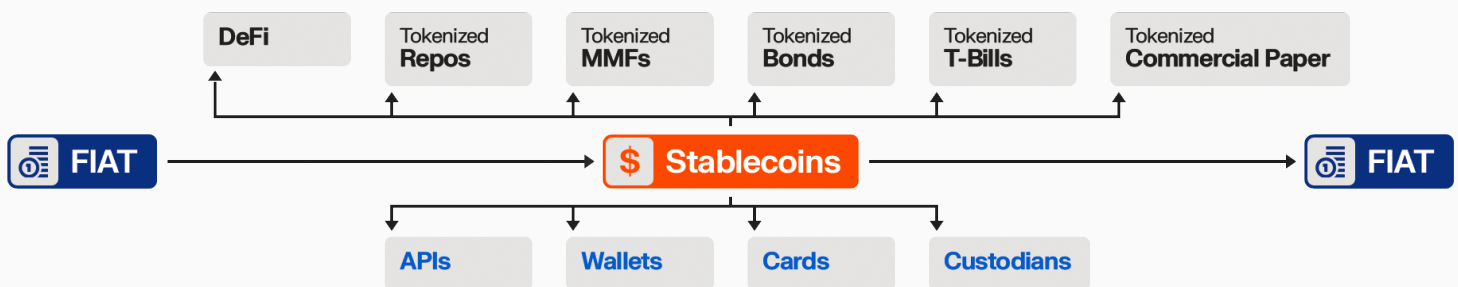
Onchain FX is reshaping the stablecoin sandwich model's **middle layer**. Instead of depending on a single global stablecoin to connect every fiat currency, **regional stablecoins** are emerging, each tailored to a specific corridor. As these tokens become interoperable across onchain ecosystems, businesses can move capital with far greater efficiency and minimal reliance on legacy rails.

"We're one of the top players in stablecoin FX for Mexico (MXP), and we've built solid partnerships to push into tougher Latam, Asian and African markets, where capital controls make conversions tricky. By teaming up with the top stablecoin issuers and local banking partners, we can offer real liquidity in places where most others can't. That's a big part of our edge, providing stablecoin liquidity not just in easy-to-access markets, but in the emerging corridors where they're really needed."

— Robert Valdes-Rodriguez, Chief Commercial Officer of Keyrock

This model **streamlines** the conversion process. Rather than swapping USD to USDC and then off-ramping to TRY, users can directly exchange **USDC for TRYB**, bypassing the fiat offramp altogether. This eliminates the need for prefunding, liquidity buffers, and the complex credit lines traditionally required for multi-currency settlement.

Companies that previously needed to liquidate money parked in **money market funds, short-term treasuries, or other fixed-income instruments** (often subject to cutoff times and multi-day settlement delays) can now instantly convert tokenized equivalents into stablecoins and settle payments onchain.



Source: Keyrock

"Stablecoins give users in emerging markets access to U.S. dollars. USDY takes that one step further, it gives them access to U.S. dollar savings. USDY is backed by U.S. Treasuries and pays yield, but It can also be used as collateral. This allows USDY to be utilized while it steadily accrues yield."

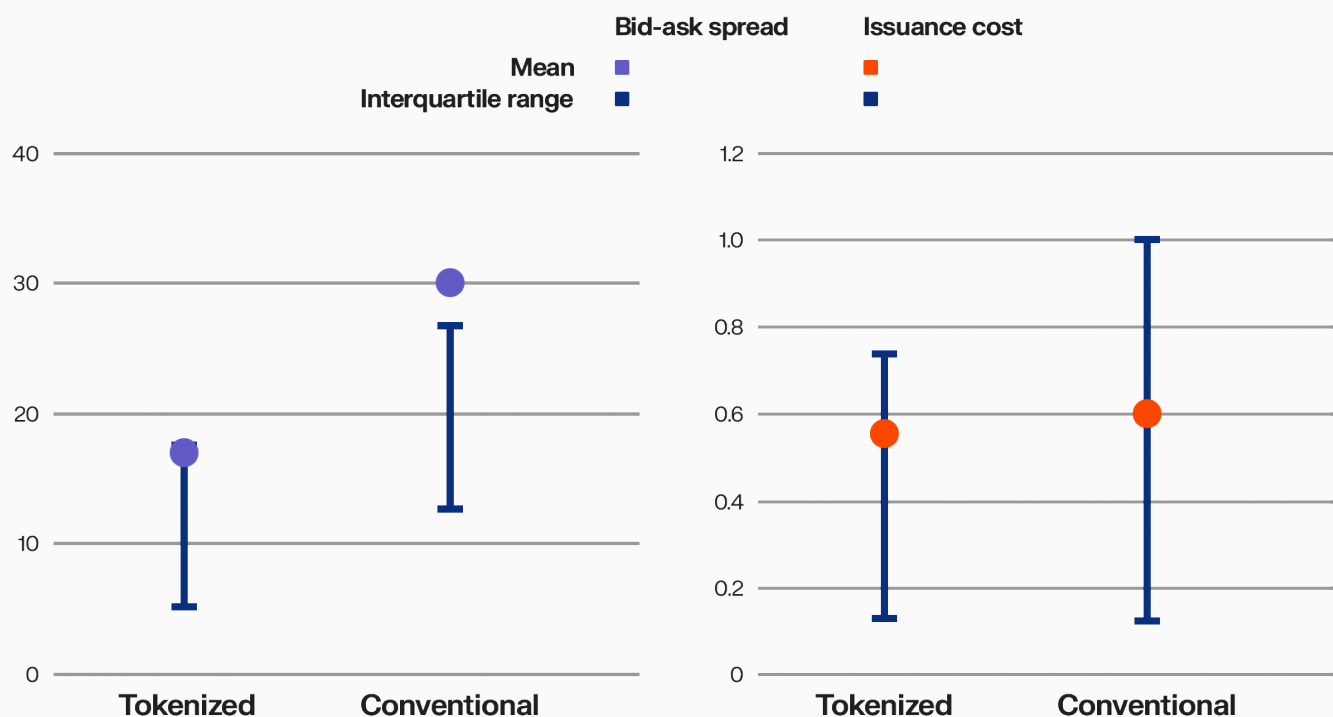
— Ian De Bode, Chief Strategy Officer of Ondo

6.4.1 Tokenization's Role in Onchain FX

In a standard securities transaction, **brokers** handle execution while **custodians** manage settlement, a process that can take up to T+2 days. With blockchain, this sequence collapses into atomic settlement, where value and ownership transfer simultaneously, eliminating operational delays.

Tokenization brings the entire transaction lifecycle, **cash, custody, and financial instruments**, onto one layer. Smart contracts can execute actions automatically based on preset conditions, eliminating manual processing. This architecture streamlines reconciliation, reduces friction, and unlocks new product design. Like smartphones unifying multiple tools into one interface, tokenization compresses payments, custody, and settlement into a single composable system.

Tokenised Bonds Outperform on Spreads, Match on Costs

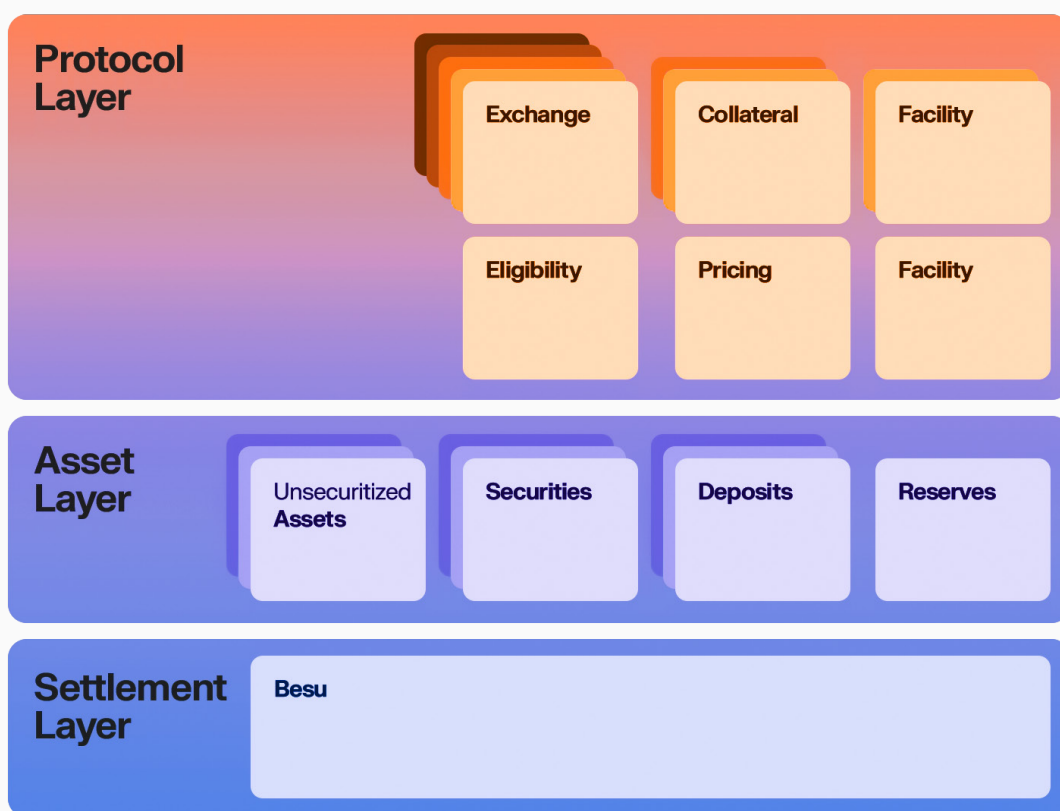


Source: BIS

This structural shift is already surfacing in bond markets. According to BIS data, **tokenized bonds** exhibit materially **tighter bid-ask spreads**, a mean of **~17 bps** compared to **~30 bps** for conventional bonds, while **issuance costs** remain comparable across both formats. This suggests that tokenized markets are not only faster with redemptions, but may also offer superior price efficiency.

Tokenized assets will serve as modular, interoperable building blocks for cross-product collateral and automated corporate actions. Rather than waiting to redeem a **money market fund** and wire funds manually, a U.S. company could instantly swap tokenized fixed-income holdings (e.g., USDY) for a local stablecoin (e.g., TRYB) to settle supplier payments in Turkey, instantly and at any time.

The New York Fed's **Project Pine** illustrates tokenization's potential to rewire interbank operations. Banks in need of liquidity could post tokenized collateral and receive digital reserves via smart contracts, with no manual steps. The central platform would validate participants, assess collateral, and execute settlement autonomously, while tracking asset values in real time for dynamic margin and automatic repayment.



Source: BIS

While Project Pine hints at a central bank-led future, much of the real progress is coming from public firms. These companies are building practical solutions to fragmented liquidity, FX inefficiencies, and cross-border interoperability.

"To support tokenized FX markets, you need to operate in both worlds: traditional FX rails and digital asset markets. We're one of the few firms that can trade FX globally while also being the first liquidity provider on new onchain pools. That dual capability is what positions us at the center of this evolving market structure"

— Kevin de Patoul, CEO of Keyrock

7.

Emerging Opportunities

7. Emerging Opportunities

This section examines **four core** areas that will shape the next phase of stablecoin adoption: regulatory clarity, interoperability, liquidity, and programmability. These were once seen as barriers, but now they are critical enablers.

Regulatory clarity is the starting point; without legal certainty, even the most advanced technologies struggle to gain traction. **Interoperability** follows as a prerequisite for usability, ensuring stablecoins can move freely across banking rails and applications. **Liquidity** then becomes a function of both trust and access, enabling stablecoins to operate at scale without slippage or fragmentation. Finally, **programmability** unlocks new capabilities altogether, from automated compliance to conditional payment flows, offering a blueprint for how stablecoins evolve from digital dollars into programmable money.

7.1 The Rules of the Rail

For stablecoins to scale with institutional backing and mainstream adoption, they need **regulatory clarity**. The absence of clear frameworks has long been a limiting factor, but that is beginning to change, presenting a major opportunity for both builders and policymakers.

For years, regulatory uncertainty held back the adoption of stablecoins in payments. A lack of clear **classification and oversight** discouraged banks and fintechs from integrating stablecoins, stalling innovation and institutional participation. **S&P Global** noted that the absence of a dedicated legal framework had “prevented broader institutional adoption.”³⁵

This challenge was not **unique** to the U.S. Around the world, stablecoin issuers faced a **fragmented legal environment** and **inconsistent regulatory expectations**. Without harmonized frameworks, institutions were understandably hesitant to engage. But that landscape has now begun to shift.

“Mass adoption of stablecoins still faces its main hurdle, regulation. Globally, there’s no unified regulatory framework, just a patchwork of evolving rules. That creates friction for companies trying to scale across borders.”

— Ben Reid, Head of Stablecoins at Bitso Business

In response, governments are now providing the regulatory clarity the industry has long needed. In the U.S., the **CLARITY Act** and the **GENIUS Act** mark a turning point, establishing clear rules for stablecoin classification, issuance, and oversight. Together, these legislative advances will reshape the regulatory landscape and unlock a new phase of stablecoin adoption.

7.1.1 CLARITY Act

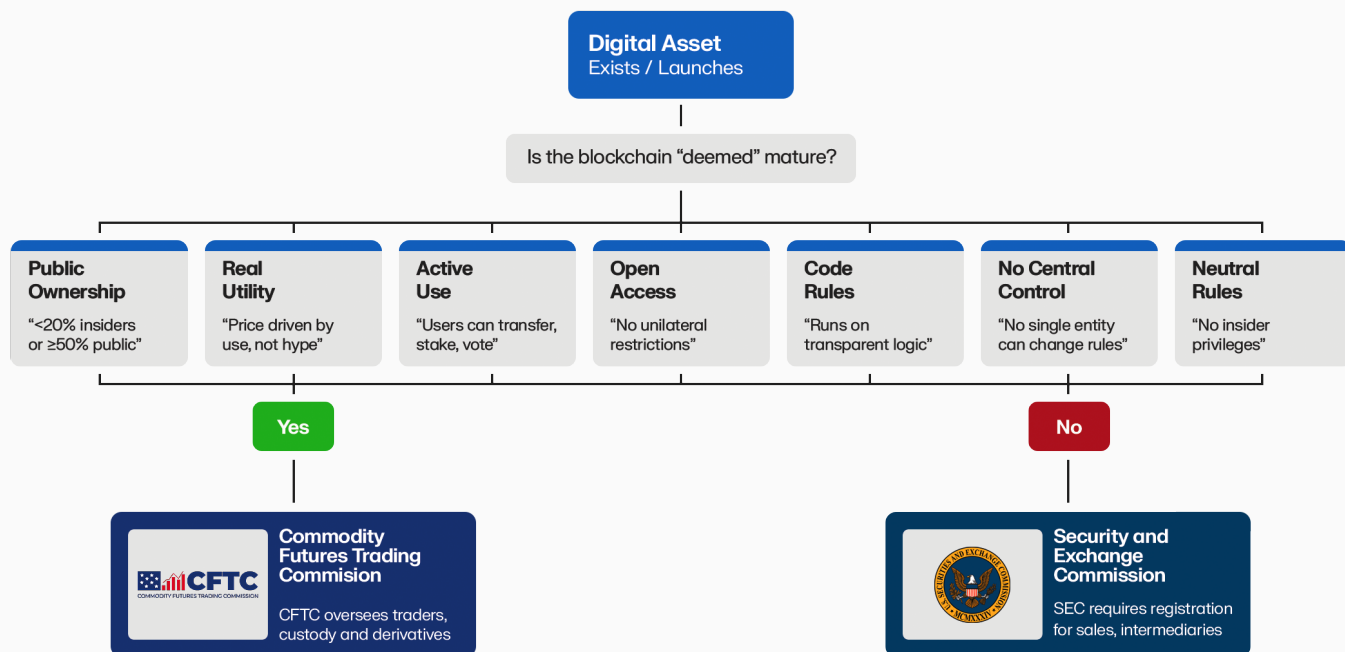
The CLARITY Act, expected to be enacted in late 2025, establishes a **definitive taxonomy** for digital assets, clarifying whether a token qualifies as a security, commodity, or “permitted payment stablecoin.” **By removing ambiguity in classification**, the law reduces compliance risk for issuers, developers, and institutional users.

Under the law, every digital asset must be **categorized** into one of three regulatory classes:³⁶

- (i) Digital asset securities, overseen by the SEC
- (ii) Digital commodities, regulated by the CFTC
- (iii) Permitted payment stablecoins

“From the start, Ripple made the deliberate choice to work with policymakers and regulators, not around them. We take a compliance-first approach, operating with over 60 payment service, crypto and money transmitter licenses domestically and globally.”

— Jack McDonald, SVP of Stablecoins at Ripple



Source: Bitcoinlaws.io, Keyrock

Crucially, fully reserved stablecoins like **USDC** are no longer at risk of being classified as **securities**. Instead, qualifying stablecoins are treated as digital commodities for trading purposes, while their issuers remain subject to appropriate regulatory oversight.

By confirming that **fully backed stablecoins are not securities**, the CLARITY Act eliminates one of the biggest legal risks facing stablecoin issuers, the threat of being treated as unregistered securities. This legal certainty reduces compliance burdens and removes a key barrier to broader product integration.

In practice, the CLARITY Act **will unlock new stablecoin business models**. Companies can now integrate stablecoins into payment apps, treasury tools, and enterprise workflows with greater legal confidence. Developers can also experiment with industry-specific stablecoin designs, knowing the tokens will be treated as commodities, not securities.

The CLARITY Act's clear dividing lines between securities and non-securities will also encourage innovation in stablecoin networks, since projects that achieve a **"mature, decentralized" blockchain status could be regulated as commodities** rather than investment contracts.³⁷

"Our biggest differentiator, and challenge, is building a compliance-first framework in a landscape where regulation is still catching up. We're deliberately taking the time to build with long-term direction, even if that means turning down short-term opportunities."

— Caio Barbosa, Founder of Lumx

7.1.2 GENIUS Act

The GENIUS Act, now signed into law, aims at creating a federal regulatory framework that balances **stablecoin oversight with fintech innovation**. Substantively, the GENIUS Act establishes the **first federal regulatory framework** for ‘payment stablecoins,’ setting rules on who may issue them, how reserves must be maintained, and **how** they must report and undergo scrutiny. It prohibits misleading representations **implying legal-tender** status or U.S. government backing.³⁸

The Act envisions a scale-based regulatory approach. **Large stablecoin issuers (with over \$10b) would come under Federal Reserve regulation, while smaller issuers could opt for state-level regulation** provided they meet federal standards.³⁹ This division aims to streamline oversight, allowing startups and smaller firms to innovate in state “sandboxes” or charters, while bringing systemically significant stablecoins under federal supervision for stability.

Category	Requirement
Issuer	State or federal approval required to create and distribute stablecoins in the US
Reserves	USD backed, held 1:1 in assets like treasury bills or bank deposits
Auditing	Annual audits plus monthly disclosures and quarterly attestations
Regulator	Regulators decide within 120 days; states can approve <\$10bn stablecoins
Banned uses	No use as cash, wholesale payment settlement, or tying to other product/service purchases

Source: FXC Intelligence

These **regulated sandboxes** give fintech companies space to **test** novel stablecoin applications, such as **programmable payments** or smart-contract-based settlement, without immediately triggering complex securities or banking compliance regimes. Just as importantly, the law improves inter-agency coordination, reducing regulatory overlap and ending the jurisdictional uncertainty that previously stalled stablecoin innovation.

At its core, the GENIUS Act is designed to **strengthen the U.S. dollar's position** by combining **innovation** with **regulatory discipline**. With the law now in place, fintechs can pursue new payment models with greater legal certainty, while large issuers operate under stable, well-defined oversight. This dual-track system accelerates compliant product development without compromising systemic safeguards.

7.2 The Last Mile

For stablecoins to go mainstream, they must become **interoperable with fiat**, not because they replace it, but because they still depend on it. Today, moving funds between these two worlds remains fragmented and clunky. Banks use domestic systems like SEPA and ACH, while stablecoins move onchain. This mismatch reveals a clear opportunity to build infrastructure that bridges both environments with simplicity and efficiency.

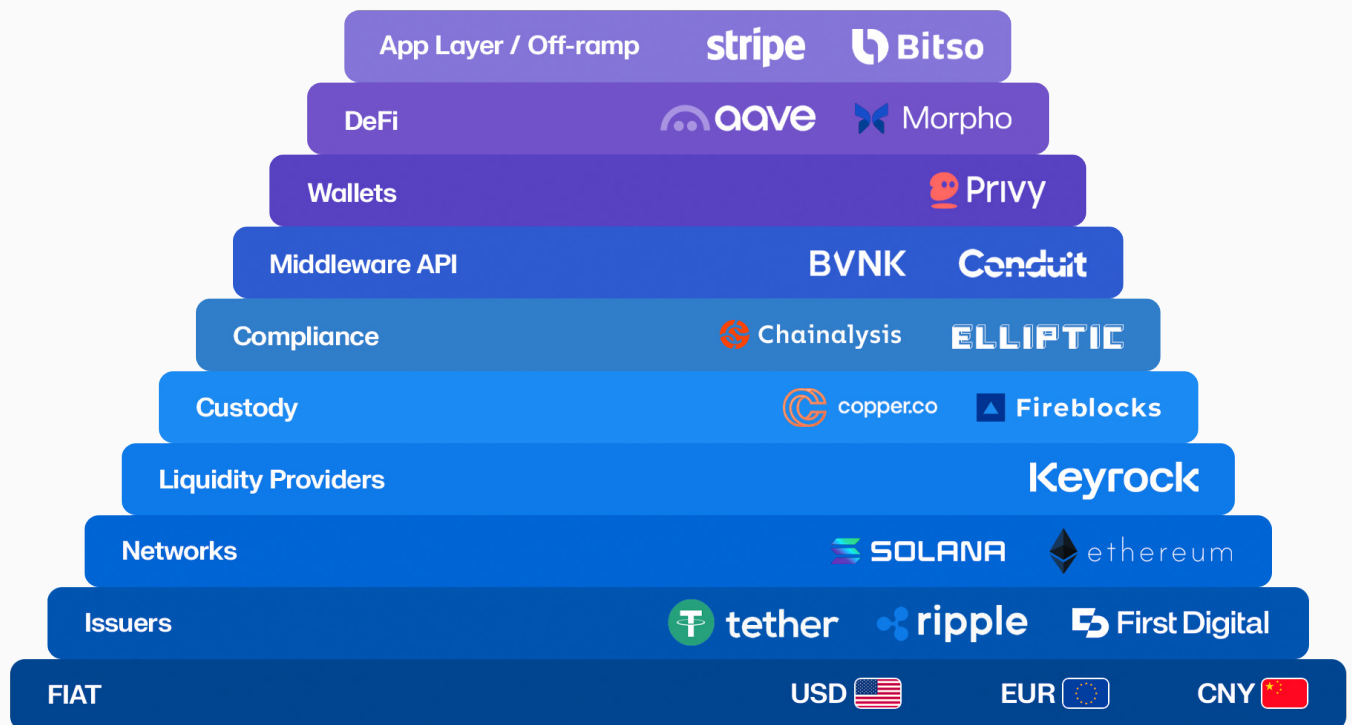
Today, most stablecoin-native businesses rely on **a patchwork of third-party providers**, such as exchanges, on/off-ramps, and compliance tools, to move funds between crypto and fiat. This complexity isn't just a barrier; it signals where scalable infrastructure is still missing. While stablecoins offer speed and cost advantages, they are not replacements for fiat. They function as a **medium**, not an **endpoint**.

The core challenge isn't moving FDUSD or USDC across blockchains, that part is solved for. The real opportunity lies in ensuring stablecoins reach end users in the **right currency, at the right time, and with minimal cost** or compliance friction. This is the essence of the last mile payout problem, converting digital value into usable local currency where it matters most.

"We think the next big unlock will be interoperability. Right now, stablecoins are largely siloed, tied to specific chains or issuers. But payment companies want to abstract that complexity. They want to send value, not worry about what chain it's on. That's why composability and interoperability standards matter so much."

— Devere Bryan, General Manager of First Digital

Consider a business in Brazil receiving USDC. Unless it can easily convert those funds into Brazilian Real, the payment may hold **limited utility**. The same applies to a company in Kenya that needs to cover local expenses in Shillings. These examples highlight a core opportunity, building efficient, affordable conversion paths that preserve stablecoin value and complete the payment cycle in local currency.



Source: Keyrock

Addressing the last-mile opportunity could follow two trajectories. The **first** involves a network of **specialized providers**, such as stablecoin issuers, exchanges, off-ramps, and compliance platforms, working in concert to create a scalable framework for converting stablecoins into local currencies. This approach is already beginning to take shape as industry players collaborate to build a more seamless fiat-crypto interface.

A more ambitious vision sees **fiat reliance diminishing**. In this scenario, stablecoins achieve mainstream status as both a store of value and a payment medium. If adopted widely enough, the need for fiat off-ramps could fade over time, as users transact and save directly in stablecoins without needing to convert to local currency.

"In some markets and use cases, we do see off-ramps becoming less relevant. But more broadly, we believe the future of payments isn't about choosing between stablecoins and fiat, it's about integrating both. The best systems will bridge them seamlessly."

— Arnold Lee, Sphere Labs CEO and Co-Founder

While both paths represent different time horizons, solving the last-mile payout remains essential. Whether through improved fiat conversion or native stablecoin usage, unlocking this final link is key to realizing stablecoins' full potential as a global payment rail.

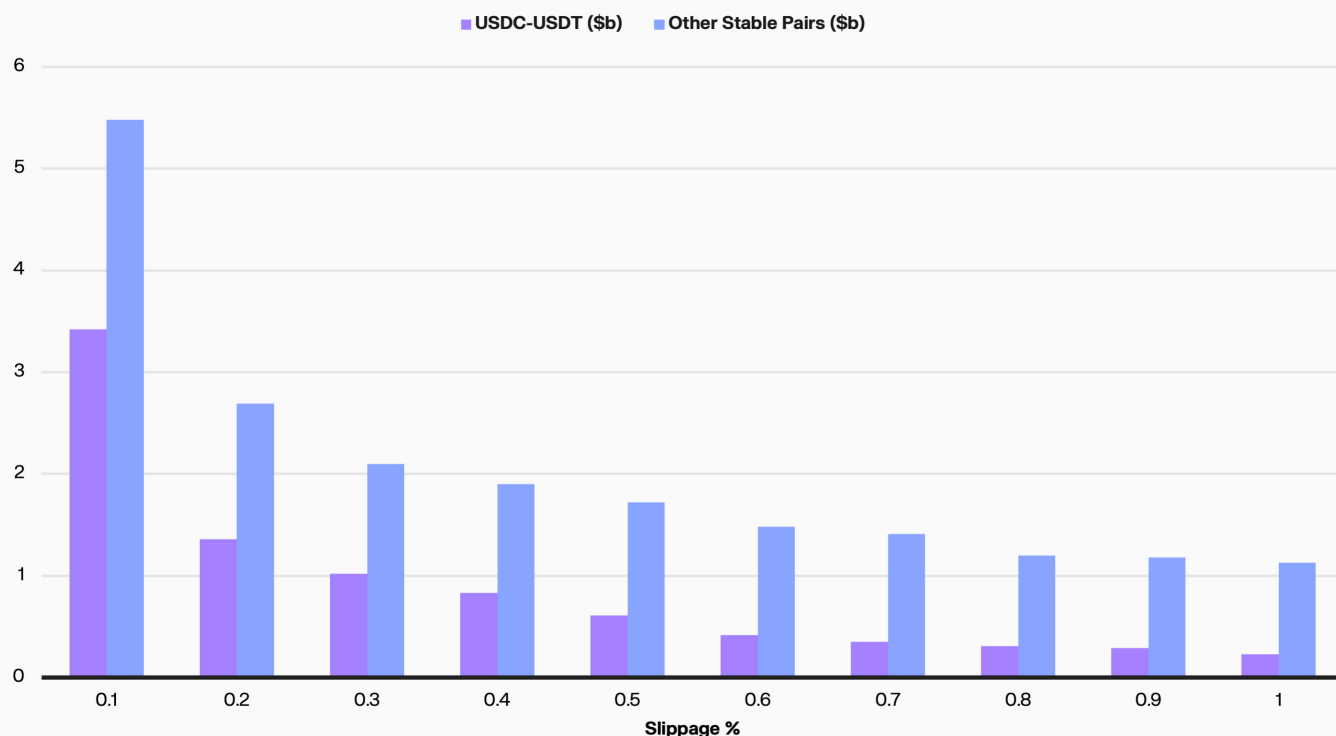
7.3 Scaling Liquidity

Solving for interoperability and fiat conversion alone isn't enough. Stablecoins must also be **liquid at scale**, across pairs, venues, and transaction sizes. Without deep, reliable liquidity, even the most seamless off-ramp systems can break down under volume.

Businesses and users often have trouble converting stablecoins into local fiat without noticeable slippage or fees. When someone attempts a sizable stablecoin conversion through an exchange, the available liquidity may simply not be deep enough to maintain a clean 1:1 exchange. Large orders push prices away from their ideal, and users end up receiving less cash than the face value of their stablecoins.

On Ethereum, slippage remains common across stablecoin swaps. More than **\$5.48 billion** in trades involving less-liquid pairs, like DAI–FRAX and GHO–TUSD, saw slippage over **0.1%**, with **\$1.9 billion** slipping beyond **0.4%**. Even USDC–USDT, one of the most liquid pairs, recorded **\$5.42 billion** in trades above **0.1%** slippage and **\$830 million** over **0.4%**. No pair is fully immune.

No Stablecoin Pair is Immune to Slippage

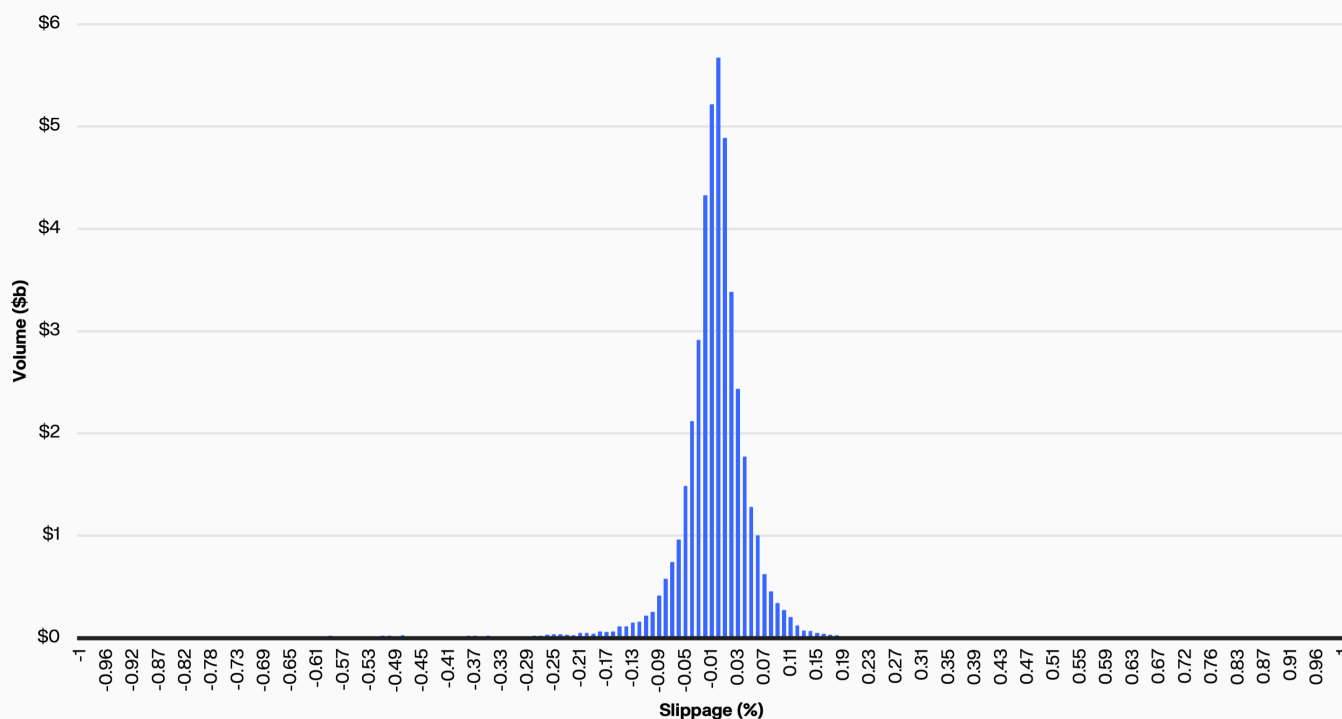


Source: @barter, Keyrock

These slippage patterns expose a structural gap. Retail users struggle to exchange at par, while even institutional players face losses when trading large volumes of non-core stablecoins. As liquidity drops off sharply outside major pairs, this creates a clear opportunity to build **better depth** and **execution reliability** across the **long tail** of stablecoin assets.

USDC-USDT exhibits a deeply liquid stablecoin pair with relatively tight execution. Our histogram shows that **\$100k+** swaps on Ethereum DEXs cluster closely around **0%** slippage, with most clearing within a narrow $\pm 1\%$ band. This reflects solid liquidity and efficient routing under normal conditions. Still, the long left tail, representing trades with negative slippage, signals that execution quality can deteriorate quickly under pressure. In those cases, users receive less than expected, exposing the fragility that still exists even in the deepest pools when attempting to transact at size.

USDC-USDT Slippage for \$100k+ Swaps on Ethereum



Source: @barter, Keyrock

Today, **1:1 minting** and **redemption** privileges are still largely limited to institutions meeting strict KYC and size thresholds. Most users are pushed to AMMs or exchanges, where they face pricing slippage and delays. This structural imbalance highlights an opportunity to widen access and bring parity between retail and institutional conversion paths.

Closing these gaps calls for a structural redesign. Stablecoins need **purpose-built liquidity infrastructure**: market-making engines capable of absorbing large flows with minimal slippage. Just as mature forex markets facilitate billion-dollar trades with tight spreads, stablecoins must evolve toward the same level of execution depth and efficiency.

"Stablecoins are not a product; they're a feature. Today's dominant stablecoin models rely heavily on centralized infrastructure: banks, T-bills, custodial systems. The untapped potential lies in decentralized stability. While early attempts struggled, we foresee a resurgence enabled by market maturity and robust risk frameworks. When this happens, stablecoins shift from passive revenue tools into active infrastructure."

— Stef Wynendaele, Managing Director of Keyrock

Just as critical is **democratizing direct issuance and redemption**. Instead of limiting 1:1 conversions to large institutions, issuers can integrate with existing financial rails, like banks, payment processors, and fintech platforms. Doing so would eliminate costly intermediaries and give smaller users access to fair, efficient conversion at scale.

Solving fragmentation across stablecoins will also require **clearinghouses**. Instead of treating USDC, USDT, and FDUSD as entirely separate currencies, a shared settlement layer between stablecoins and fiat could enable instant, fee-predictable swaps between any participating stablecoins. This would create network effects where the whole becomes greater than the sum of its parts.

Building true liquidity infrastructure is not just about price stability, it's about creating a unified foundation. Without **broad mint and redemption access and institutional-grade depth**, stablecoins will remain fragile under stress. To fulfill their role as digital cash and global settlement tools, they must be **stable, seamless, and universally accessible, across users, assets, and transaction sizes**.

7.4 Money Becomes Software

The **programmability** of stablecoins in cross-border payments remains largely untapped. While payment companies are still figuring out basic integration without violating regulations or losing banking relationships, we haven't **scratched the surface** of their true potential.

Stablecoins enable **condition-based transactions**. Logic such as time-triggered transfers, milestone-based payouts, or multi-step workflows can be embedded directly into the stablecoins. This turns static money into dynamic financial infrastructure, a shift with far reaching implications.

"Programmability unlocks real-time FX and streamlines everything that follows. With Onchain FX, stablecoins pegged to different currencies can be swapped instantly, no teams of humans calling around for pricing. The bigger shift is downstream: businesses used to net 60 or 90 day terms could negotiate discounts by paying instantly. A \$10b industry like trade finance could be redefined by smart contracts that trigger the moment goods are offloaded. We're going to completely upend how money moves."

— Kirill Gertman, CEO and Founder of Conduit

Additionally, this enables **trustless escrow arrangements** and "**payment-vs-delivery**" logic, where, say, payment is auto-released to a supplier when a shipment's delivery is confirmed. Such programmable escrow and supply-chain payments can reduce fraud and disputes, since the code enforces the deal transparently.

Programmability also brings **composability and integration** benefits. Stablecoins live on shared ledgers, so different applications can plug into them permissionlessly. This means a stablecoin can seamlessly travel through **various services** (e.g. a fintech app can trigger a stablecoin to move into a lending protocol, then to a payment processor), all via code. Funds become “**lego blocks**” that businesses can programmatically allocate in real time.

“Stablecoin programmability is a game-changer for payment companies. Through smart contracts, they can automate liquidity provisioning, streamline reconciliation, and drive down operational costs. It’s a chance to rebuild the back office from the ground up.”

— Arnold Lee, CEO and Co-Founder of Sphere Labs

Stablecoin programmability is poised to transform corporate finance and B2B transactions. For instance:

1. A firm could **automate supplier payments** such that once goods are marked received in the inventory system, a smart contract releases the exact payment in stablecoins to the supplier
2. Corporate treasuries are beginning to explore using stablecoins to automate **liquidity management**. An algorithm might convert excess cash to a USD stablecoin at certain hours and deploy it to earn **yield**, then automatically convert back to fiat when needed for **payroll**
3. **Payroll** can be **streamed** in real-time. Instead of bi-weekly paychecks, employees (or gig workers) could be **paid by the hour** or by task completion, with stablecoins continuously released as work is done

“Stablecoins make every aspect of treasury management faster, cheaper, and more efficient. For companies managing multi-currency flows, it means greater flexibility and automation. The programmable nature of stablecoins enables dynamic treasury strategies with minimal manual intervention, while blockchain’s transparency enhances compliance and auditability. All the way down, the process is just better.”

— Kirill Gertman, CEO and Founder of Conduit

In the emerging Internet of Things economy, machines will need to transact. Their programmability allows devices to **execute payments when certain data-driven conditions** are met. For example:

1. An electric vehicle could automatically pay a charging station in stablecoin based on kilowatt-hours consumed
2. A drone could rent access to an air corridor by paying small fees per second of usage

These micropayments can happen autonomously because the **stablecoin's smart contract can be linked to IoT sensor data**. This could scale to a future where **appliances, vehicles, and smart infrastructure** use stablecoins as a common machine currency. The negligible fees and global interoperability of stablecoins make such use cases feasible where traditional payment fees or delays would be prohibitive.

Programmable stablecoins also unlock innovations in **insurance and financial contracts**:

1. Instead of **filing a claim** and waiting for an insurer's approval, a smart contract could automatically pay out a stablecoin to the policyholder when an objective trigger is detected
2. A classic case is **flight delay insurance**. If a flight is delayed beyond a threshold (data verifiable via an API), a smart contract immediately releases a stablecoin payout to the affected traveler
3. Consider **real estate escrow**. The buyer's funds could be held by a contract and automatically released to the seller when a land registry updates the deed to the new owner

Such self-executing agreements reduce the need for costly escrow agents and could speed up settlement in industries like real estate, trade finance, and capital markets.

"Stablecoins have a superpower few talk about: programmability. Unlike traditional systems where messaging and settlement are separate, stablecoins combine them. Each transaction carries both value and logic. That unlocks real-world use cases like escrow without intermediaries, parametric insurance, real-time treasury, and supply chain finance."

— Chris Harmse, Co-Founder and CBO of BVNK

Looking forward, retail apps will integrate stablecoin **payment options for e-commerce**. For example:

1. Businesses can automatically split a payment into a **merchant portion** and a **tax portion**, or enforce a refundable escrow until the item is delivered
2. **Loyalty programs** could issue rewards as stablecoins that are immediately usable or investable by customers (unlike traditional points)

“One of the most exciting features didn’t even come from us, it came from a developer in the community. They built a system that automatically tops up the card balance from DeFi positions whenever it runs low. It’s a perfect example of programmability improving user experience and reducing friction. That kind of automation is where onchain payments shine.”

— Stefan George, Co-Founder of Gnosis Pay

Businesses that embrace stablecoins early by upgrading their payment flows and products stand to gain a competitive edge. Money is becoming more software-like, and the possibilities for innovation in payments are virtually endless.

8.

Conclusion

8. Conclusion

The story of stablecoin payments begins with the **infrastructure divide**, a global system where the ability to build and scale financial innovation depends on access to a narrow set of **legacy building blocks**. For decades, cross-border money movement has been bound by rails that were not designed for the speed, transparency, and programmability that today's economy demands. **SWIFT's** architecture, the capital sink of **prefunding**, and the slow, opaque cycles of **netting** have delivered stability, but at the cost of **trapped liquidity, fragmented flows, and systemic exclusion**. Especially in markets that need better access most.

Stablecoins have emerged as a parallel model for **how value moves**. By collapsing **messaging and settlement** into a single **programmable layer**, they unlock efficiencies the old system cannot replicate. Where prefunding immobilizes trillions in idle accounts, stablecoin credit protocols mobilize capital in real time. Where netting requires a trusted central coordinator, onchain protocols deliver continuous, permissionless, and privacy-preserving settlement.

Stablecoins are the foundation for a **new payments architecture**. The build-out of the stablecoin stack has already begun with the **stablecoin sandwich model** that bridges fiat ramps with onchain rails; **virtual accounts** that let any wallet function as a bank account; and **payment networks** that integrate issuance, orchestration, yield, and end-user services. In this architecture, stablecoins are the **connective tissue** between fragmented domestic systems, enabling an internet-native value layer that can serve every participant equally, whether a global bank or a rural entrepreneur.

Real-world adoption is following this build-out. In **B2B** payments, stablecoins are turning static treasury balances into yield-generating, high-velocity working capital. In **P2P** flows, they are cutting the cost of remittances by multiples and delivering last-mile access in local currencies. In **card-based spending**, they are making stablecoins usable at the point of sale anywhere in the world. And **Onchain FX**, though still early, signals a future where cross-currency settlement happens atomically, without correspondent banks or overnight risk.

The opportunity now hinges on **scaling**. Regulation is defining the rules of the rail. Liquidity is deepening across corridors and currency pairs. Interoperability is moving from aspiration to reality as issuers, payment networks, and domestic systems connect. And programmability, the ability to embed compliance, governance, and logic into the payment flow itself, is turning stablecoins into financial **software**.

Taken together, these forces mark a strategic inflection point. Stablecoins have grown from a trading tool into a payment rail capable of moving **\$1 trillion** in annual payment flows within the decade, capturing a **double-digit share** of global cross-border flows and a significant slice of the U.S. money supply. Their trajectory is toward systemic relevance, reshaping how liquidity is managed, how policy is transmitted, and **how money itself is experienced**.

The legacy system evolved in an era defined by delayed communication, manual reconciliation, and tightly gated access. Stablecoin rails are being built for a world where **value moves like information**. Instantly, transparently, and without borders.

The choice for institutions, fintechs, and policymakers is no longer whether stablecoins will matter, but **how** they will participate in, **shape**, and **compete** on this new rail. **The next decade** will decide which players adapt and thrive, and which are left operating on infrastructure that no longer defines the frontier. The trillion-dollar opportunity is here and it is transforming the architecture of global value exchange.

"The next frontier for stablecoin payments is removing the last frictions in how value moves. Making transactions as seamless as sending a message. At that point, dollars may simply sit as reserves, like gold once did, while stablecoins handle the movement of value for trade, settlement, and spending. With the entire value chain operating onchain, the need to on or off ramp could all but disappear."

— Kevin de Patoul, CEO of Keyrock

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Every Monday, Keyrock researchers provide a weekly roundup covering **macro trends, crypto developments, and on-chain events** from the previous week, along with forward-looking analysis and trade ideas. Cut through the noise and get actionable insights.



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