Stablecoins:

The Emerging Market Story

September 2024

Authored by: CASTLE ISLAND VENTURES   BREVAN HOWARD DIGITAL   Sponsored by: VISA

> "Money was not coin, currency, or credit card. That was form, not function. Money was anything customarily used as a measure of equivalent value and medium of exchange. Money would become nothing but alphanumeric data in the form of arranged energy impulses. It would move around the world at the speed of light at minuscule cost by infinitely diverse paths through the electromagnetic spectrum."
>
> - Visa founder Dee Hock

When Visa was founded over fifty years ago by Dee Hock, his original vision for Visa was to be more than just a card network. He wanted it to become the world's premier system for the exchange of electronic value regardless of currency, form factor, or underlying technology.

Today, Visa is a global payments technology company that builds and operates products enabling consumers, merchants, financial institutions, fintech's, and governments to securely move value across the world. Visa has more than 4.5 billion cards worldwide, and our products collectively reach 130+ million merchant locations, approximately 14,500 financial institutions, and 200+ countries and territories. In the past year alone, we facilitated over 296.8 billion transactions and $15.5 trillion in payment volume.

We believe stablecoins represent a payment innovation that has the potential to expand access to secure, reliable, and convenient payments to more people in more places.

Today, Visa powers 50+ wallet partners, enabling fast, easy, issuance of Visa credentials, empowering stablecoin users to quickly and securely pay with Visa at over 130 million merchants worldwide. Visa is also piloting the use of stablecoins like USDC to expand settlement capabilities for issuers and acquirers globally providing increased flexibility for modern treasuries.

We have partnered with Allium Labs to create the Visa Onchain Analytics Dashboard, an easily digestible and freely available tool, providing clear insights into stablecoin activity. In addition to partnership with this report, Visa published an updated version of the dashboard so clients and policymakers can follow stablecoin data in real time, featuring new insights, chart customizability, and a refined adjusted transaction methodology in collaboration utilizing filters agreed on collaboratively with Castle Island Ventures, Allium Labs, and Artemis. The updated dashboard is live at http://visaonchainanalytics.com/.

If you want to learn more about how Visa is powering the future of stablecoins visit: www.visa.com/crypto.

- Cuy Sheffield, Global Head of Crypto

VISA

Table of Contents

The views expressed in this document are not intended to and should not be viewed as investment advice.
Please refer to the section entitled "Legal Information and Disclaimer" at the end of this document.

Contributors

CASTLE ISLAND VENTURES

Castle Island is a Boston, MA based venture capital firm focused exclusively on public blockchains. We invest in infrastructure and application companies that will enable these transformative protocols to power services for the next billion users.

Contributors:

Nic Carter, Henry Harris, Wyatt Khosrowshahi, Charlie Ambrose

---

BREVAN HOWARD DIGITAL

Brevan Howard Digital ("BH Digital") is the dedicated crypto and digital asset division of Brevan Howard, providing institutional investors access to the wide range of diverse opportunities presented by the structural disruption and innovation of blockchain technology. BH Digital offers unconstrained, alpha-centric, and diversified exposure to investment opportunities across the digital asset ecosystem via a multi-manager, multi-strategy approach across both private and public markets. The 60+ member team manages more than $2bn and operates in 8 offices worldwide.

Contributors:

Peter Johnson, Ross Trachtman

Artemis

Artemis is the premier data science layer for blockchain data. Industry leaders like Grayscale, Pantera, VanEck, and Franklin Templeton trust Artemis to help them understand what is happening onchain.

Contributors:

Anthony Yim

Design and typesetting: Jason Benjamin

Introduction

Stablecoins – tokenized representations of fiat currencies circulating on blockchains [1] – are unambiguously the "killer app" of crypto so far. There are over $160 billion worth of stablecoins in circulation today, up from single digit billions as recently as 2020. Over 20 million addresses make a stablecoin transaction on public blockchains every month. And in the first half of 2024, stablecoins settled (according to our adjusted estimates) over $2.6 trillion dollars worth of value. Stablecoins offer considerable advantages relative to existing payment systems, including native programmability, strong auditability properties, fast settlement, the ability to self-custody, and native interoperability.

While they initially emerged as a crypto-native collateral type and settlement medium for traders and exchanges, they have crossed the chasm and have found wide adoption globally in the ordinary economy. Today, it is clear that users globally value the ability to hold tokenized representations of fiat currencies (in the case of stablecoins, mainly USD) directly in their own custody, rather than relying on a bank account, which may be unreliable or inaccessible. Stablecoins are also being adopted for cross-border payments, payroll, trade settlement, and remittances. Stablecoins also increasingly offer yield provision, whether natively or through decentralized finance protocols. In emerging markets, adoption of stablecoins for payments, currency substitution, and access to high quality forms of yield is accelerating. In this report, we begin with extensive and novel onchain data regarding stablecoin usage, that provides context for the following survey results from acknowledged crypto users in five key emerging market economies. Interspersed with the onchain data and survey results, we have also included qualitative insights from companies operating in these markets. We believe that together, this onchain data, survey data, and qualitative local insights provide a holistic picture of global stablecoin usage.

Based on the divergence between stablecoin activity and crypto market cycles, it is evident that stablecoin adoption has moved beyond merely serving crypto users and trading use cases.

Spot Crypto Trading Volume vs Stablecoin Monthly Sending Addresses [2] [3]

---
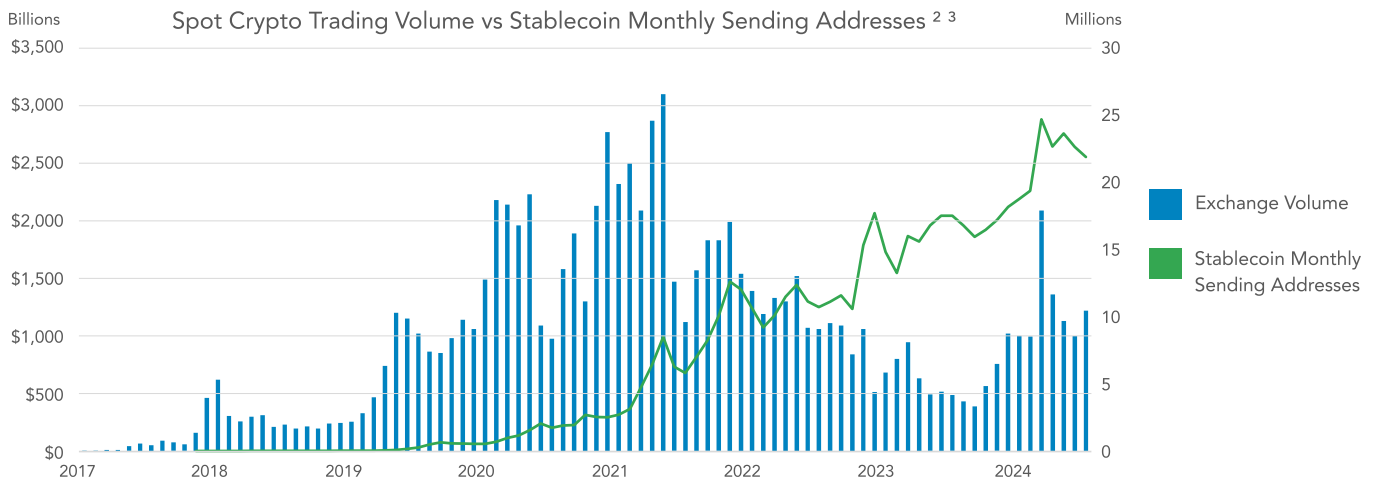
[1] Definitions of stablecoins differ, and there are many different variants. For the purpose of this study, we define a stablecoin as any tokenized representation of a fiat currency in which the liabilities circulate on a public blockchain. We are deliberately agnostic to stability mechanism or reserve composition. For a fuller taxonomy and definitional treatment, see Cryptodollars: The Story So Far (Castle Island Ventures, 2020)

[2] Exchange volume refers to CoinMarketCap's aggregate denoised exchange volume figure for spot cryptoassets. Stablecoin active addresses refers to the number of onchain addresses sending a stablecoin transaction in a given month, via Artemis

[3] Unless otherwise specified, all onchain data cited in the study is courtesy of Artemis

If stablecoins were merely utilized as a form of settlement between traders and crypto exchanges, or as a collateral type on these exchanges, as is commonly alleged, you would expect stablecoin settlement volumes, transaction counts, and monthly active addresses to largely correlate with the crypto market cycles. However, the divergence that appeared throughout the cooling off period in crypto exchange volumes in 2022-23 suggests that stablecoins have meaningful usage outside of mere speculative uses. Anecdotally, we are aware that stablecoins have indeed found growing non-trading usage, particularly in emerging markets. They are used for currency substitution (to flee volatile or depreciating local currencies), as a dollar-based bank account alternative, for b2b and consumer payments, for access to various forms of yield, and for trade settlement. Stablecoins are particularly appealing when dollar banking is non-existent or hard to access, in countries exhibiting high inflation, or countries with poor or costly access to fiat transactional networks.

Yet despite these anecdotal observations, the prevalence of non-crypto use cases among stablecoin users in emerging markets has not to date been quantified. As such, we commissioned a study of self-reported crypto users in five major emerging market countries – Brazil, India, Indonesia, Nigeria, and Turkey – in order to better understand the frequency of stablecoin usage, and the ways in which emerging market users are engaging with these instruments. Rapid consumer adoption of dollar-denominated stablecoins has in some cases caused concern about uncontrolled currency substitution and has led to reprisals against crypto operators in these countries.

To date, no surveys focusing specifically on stablecoin adoption and usage modes have been conducted. Crypto adoption studies have focused on general crypto penetration (see Chainalysis, Coinbase, or Consensys [4]), but not stablecoins specifically. Prior work on the stablecoin front includes the Cambridge Cryptoasset Benchmarking Study (2020) which found increasing availability of support for stablecoins among service providers and at exchanges, as well as increased demand for stablecoins during times of cryptoasset volatility. The Castle Island Cryptodollars whitepaper (2020) also found that stablecoins were growing their market share in terms of onchain value settled relative to native cryptoassets like Bitcoin or Ethereum, but did not characterize end user behavior specifically. Lastly, Kulkarni et al (2020), Demirgüç-Kunt et al (2022), and Barthelemy et al. (2023) each examine the possibility for stablecoins to enhance financial inclusion in developing markets. Brevan Howard Digital in The Relentless Rise of Stablecoins (2023) found significant growth in the stablecoin sector along a variety of onchain metrics.

In this report, we combine survey results from acknowledged crypto users in five key emerging market economies with novel onchain estimates, alongside qualitative insights from companies operating in these markets, to generate a holistic picture of global stablecoin usage. Specific attention was given to stablecoin usage for non-crypto purposes, such as remittance, cross-border payments, payroll, trade settlement, and b2b transfers.

---

[4] See: Chainalysis, "The Global Crypto Adoption Index" (2023); Coinbase Institute, "International Survey of Web3 Adoption" (2023); Consensys, "The State of Web3 perception around the world" (2023)

Methodology

A survey was conducted between May 29th 2024 and June 13th 2024 by YouGov.

The purpose of the user survey was to understand metrics, behaviors, and attitudes related to the usage of stablecoins across key global markets. We surveyed 500 adults (18+) from each of the following countries: Brazil, Turkey, Nigeria, India, and Indonesia. We selected for large, populous nations with anecdotal evidence of stablecoin penetration in the general population. The countries surveyed rank sixth on average on the 2023 Chainalysis Global Crypto Adoption Index, with India and Nigeria occupying the top two spots.

To qualify for the study, respondents must have used cryptocurrency, blockchain network(s) or blockchain wallet(s) in the past 12 months. Prior stablecoin usage was not required, although the large majority of respondents (93 percent) had experience with stablecoins. Respondents represent a mix of age, gender, education and region within each country.

The online survey was approximately 15 minutes long and optimized for both computer and mobile devices. Surveys were conducted in respondents' language of origin. Responses to text entry fields were translated.

For onchain data, Artemis data was primarily used, supplemented with Coin Metrics and Allium data.

◈ Mountain Protocol

Mountain Protocol is the issuer of the first nationally regulated and permissionless yield-bearing stablecoin. By virtue of being yield-bearing, USDM is more suitable for usage wherever there is working capital.

This can include as collateral for reinsurance policies, like the ones issued by Nayms, where real world risks are covered by crypto collateral.

Another use case is as collateral for lending. In most emerging markets, banks are hesitant to issue unsecured loans to businesses and wish to have collateral posted. However, borrowers do not wish to have USD in the banking system, as it is less trusted in certain jurisdictions A company like Aconcagua solves this problem, warehousing USDM in a multisig contract, acting as escrow agent, and allowing banks to issue such loans as secured, extending the credit capabilities.

Finally, remittance companies are switching their working capital to USDM. This transition is still in the early stages, as acceptance of USDT is still king. With an interest-bearing stablecoin, these companies can increase their profitability by holding their float in yield-bearing assets.

Blockchain Data

Onchain data – that is, usage metrics evident from looking at blockchains directly – establishes a clear story about the continued growth of stablecoins. However, onchain data requires denoising and careful interpretation, and is prone to overestimates. Here we begin with new estimates of stablecoin traction, and then proceed to the survey data in order to translate uncharacterized aggregates to specific usage modes.

The overall supply of stablecoins has grown rapidly since 2017, when the aggregate float of stablecoins was still under $1 billion. It peaked at approximately $192 billion in March 2022, prior to the dissolution of Terra's UST and the credit crunch that suppressed crypto-native interest rates, drove down crypto trading volumes, and damaged the balance sheets of crypto-native firms. After the credit crisis largely played out, stablecoin supply began to recover in December 2023, as major cryptoassets began to rally ahead of the approval of Bitcoin ETFs in the US.

Stablecoin Supply by Issuer
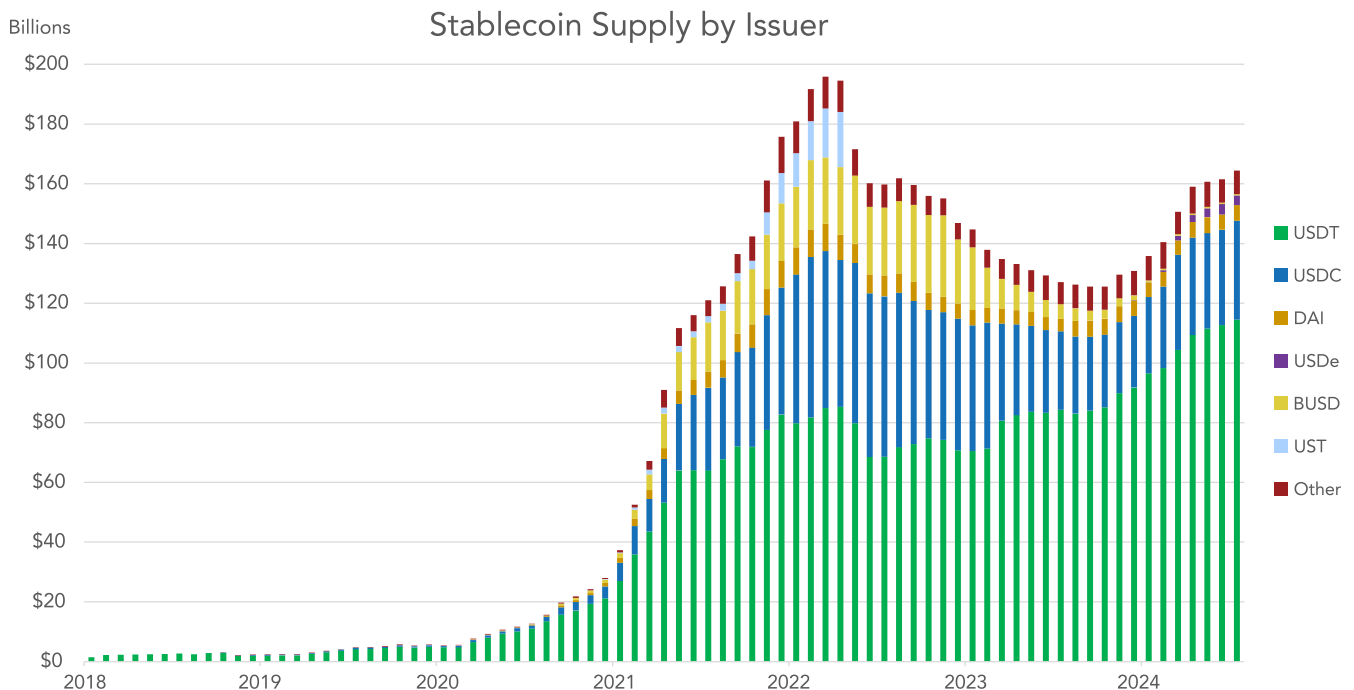
In recent months, various new forms of stablecoins have emerged, as various regulatory domiciles have passed clarifying stablecoin legislation, hoping to attract issuers. Some of the most proactive jurisdictions in creating regulatory frameworks for stablecoins include the EU, Singapore, Dubai, Hong Kong, and Bermuda.

As both crypto-native interest rates and sovereign interest rates rallied, certain stablecoin issuers began experimenting with models in which they began passing along yield to holders, either programmatically onchain or via third party yield-sharing arrangements. Most notably, Ethena's USDe, which is a synthetic USD token whose yields derive from arbitraging Bitcoin and Ethereum futures against spot, claimed the fourth spot with a supply exceeding $3 billion. The existence of

8

programmatic (and in some cases permissionless) yield – whether crypto-native, or simply passing along the T-bill rate – in stablecoins, adds a new value proposition for end users who lack easy access to dollar-based money market funds.

While certain stablecoin experiments like Nubits or BitUSD preceded Tether, USDT (initially issued on the Bitcoin Omni protocol) was the first stablecoin to achieve breakout success, despite a controversial history. Throughout the period, Tether has remained largest and most widely-utilized stablecoin. Its dominance dipped below 50% in 2022 as Circle's USDC saw considerable growth and Terra's UST briefly gained traction. Tether's market share by supply has since recovered and stabilized around the 70 percent range.

Tether Share of Stablecoin Supply
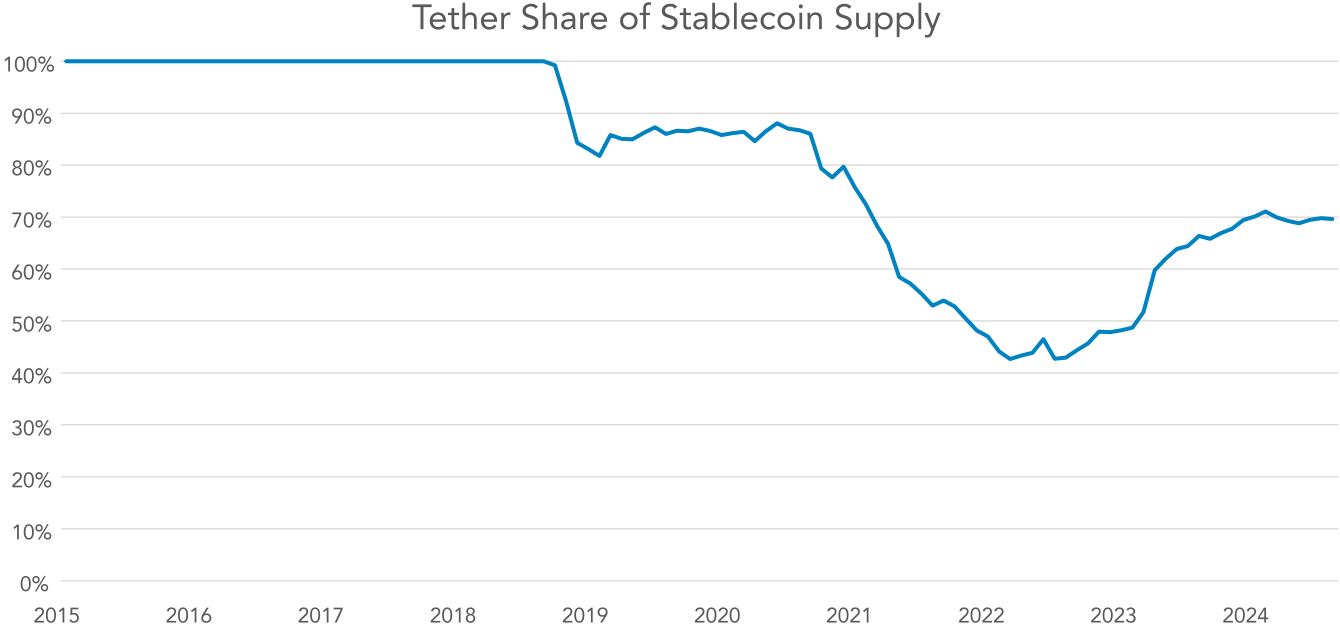
For this study, we extended existing approaches to estimate aggregate stablecoin settlement volume. Nominal (gross) figures are not a reliable estimate of settlement volumes, as the nature of blockchains (with change transactions on Bitcoin, for instance) and how they are utilized by certain agents (exchanges, mixers and various bots) creates a significant overestimate that can create an overstatement of settlement volume by an order of magnitude. As such, significant denoising and de-duplication efforts must be undertaken. Adjusted settlement volume remains a challenging figure to estimate, and there is no firm "ground truth" – only estimates and best guesses. We do not represent our estimates as authoritative.[5]

Together, our two filters enabled us to significantly reduce outliers and spikiness in the data and derive a more conservative estimate of settlement volume which we still think is faithful to the ground truth.

---

[5] For more details on our denoising methodology for the transaction volume metric, see Appendix B

Adjusted Stablecoin Transaction Volume Settled by Network, Monthly [6]
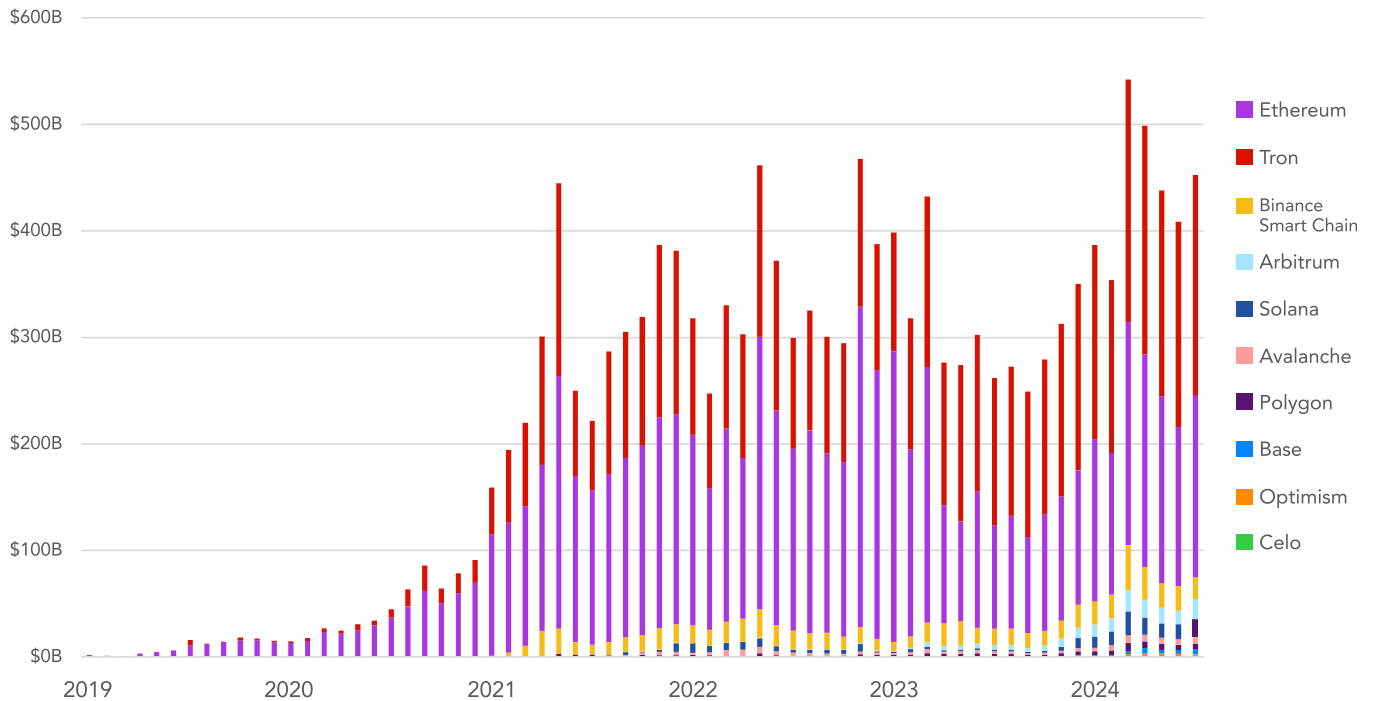
Based on our adjustments, we estimate that stablecoins in the aggregate conservatively settled $3.7 trillion worth of value in calendar year 2023, and $2.62 trillion in the first half of 2024, at an annualized pace of $5.28 trillion. Notably, stablecoin settlement volumes have grown steadily throughout the market cycle, despite the selloff in cryptoassets and declines in exchange volume evident in 2022 and 2023. This is another indication that stablecoins have reached a new set of users that are not solely interested in using them for exchange settlement.

After denoising, the most popular blockchains by value settled as of June 2024 are Ethereum, Tron, Arbitrum, Coinbase's Base, Binance Smart Chain, and Solana, in order.

Monthly sending addresses evidences a similar if even more stable story of growth. We prefer this metric to transaction count as it is generally more resistant to manipulation (but not totally immune).

Stablecoin Monthly Active Sending Addresses
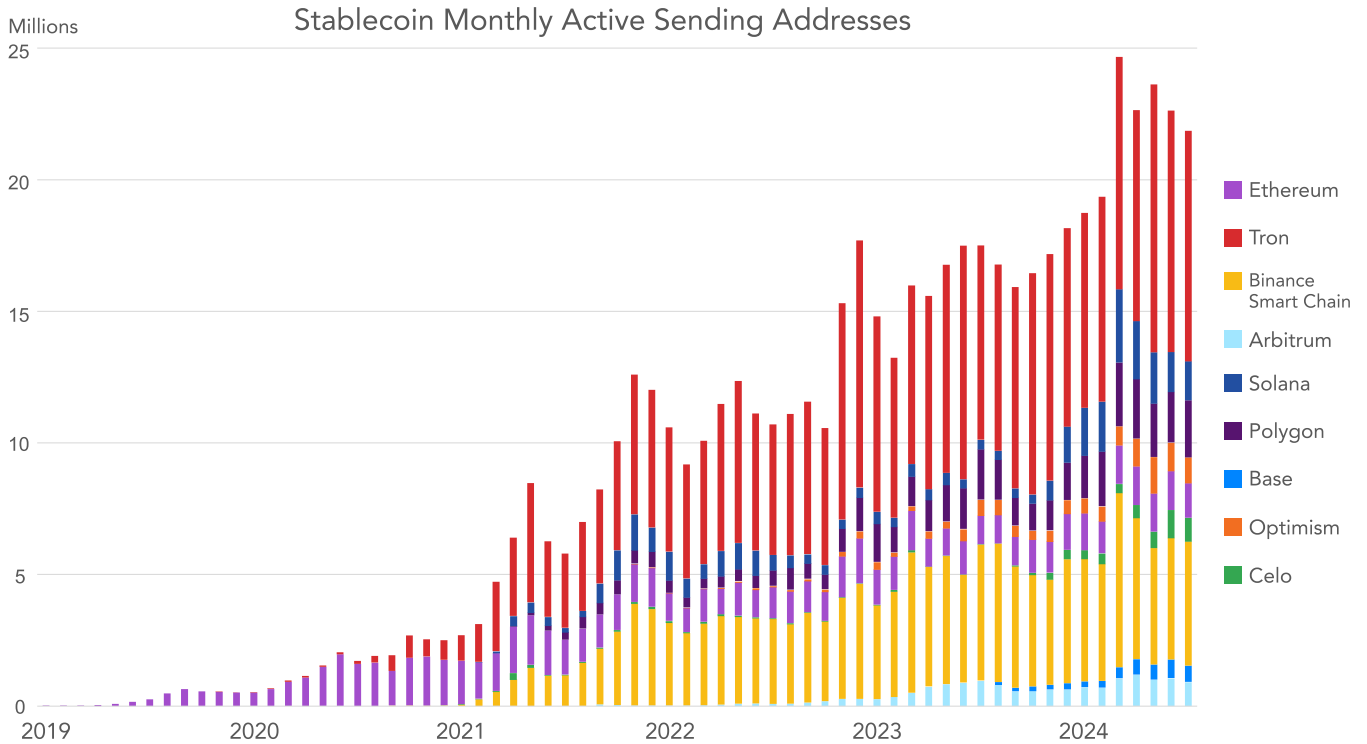
The most popular blockchains for sending stablecoins are Tron, Binance Smart Chain, Polygon, Solana, Ethereum. The generally higher fee burden on Ethereum means that there tend to be fewer addresses transacting and fewer transactions than Tron or Binance Smart Chain, but Ethereum is still the leader in value settled.

Stablecoin Monthly Active Sending Addresses
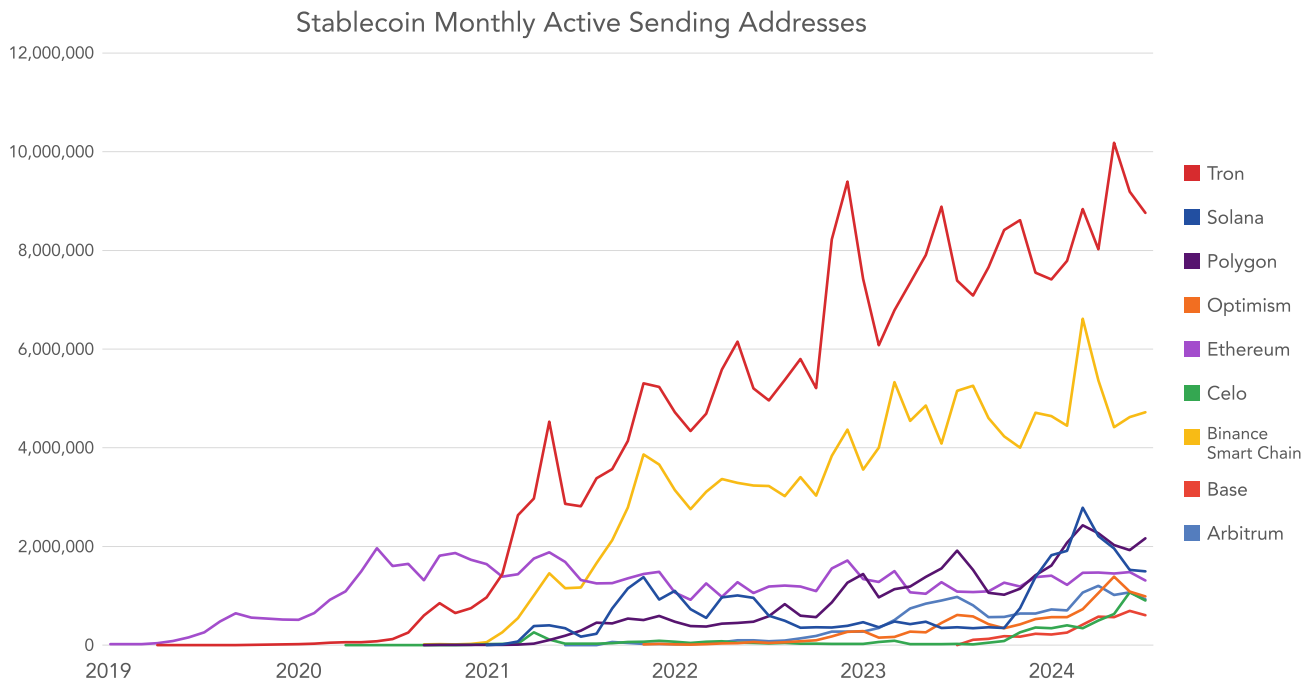
When stablecoin settlement volumes are compared to native cryptoassets, a story emerges of the "dollarization" of blockchains. While historically Bitcoin and Ethereum have represented the primary media of exchange on public blockchains, stablecoins – and almost exclusively dollar-linked stablecoins – have steadily gained market share.

Relative Onchain Transaction Volume: Stablecoins vs Layer 1s and Layer 2s [7]
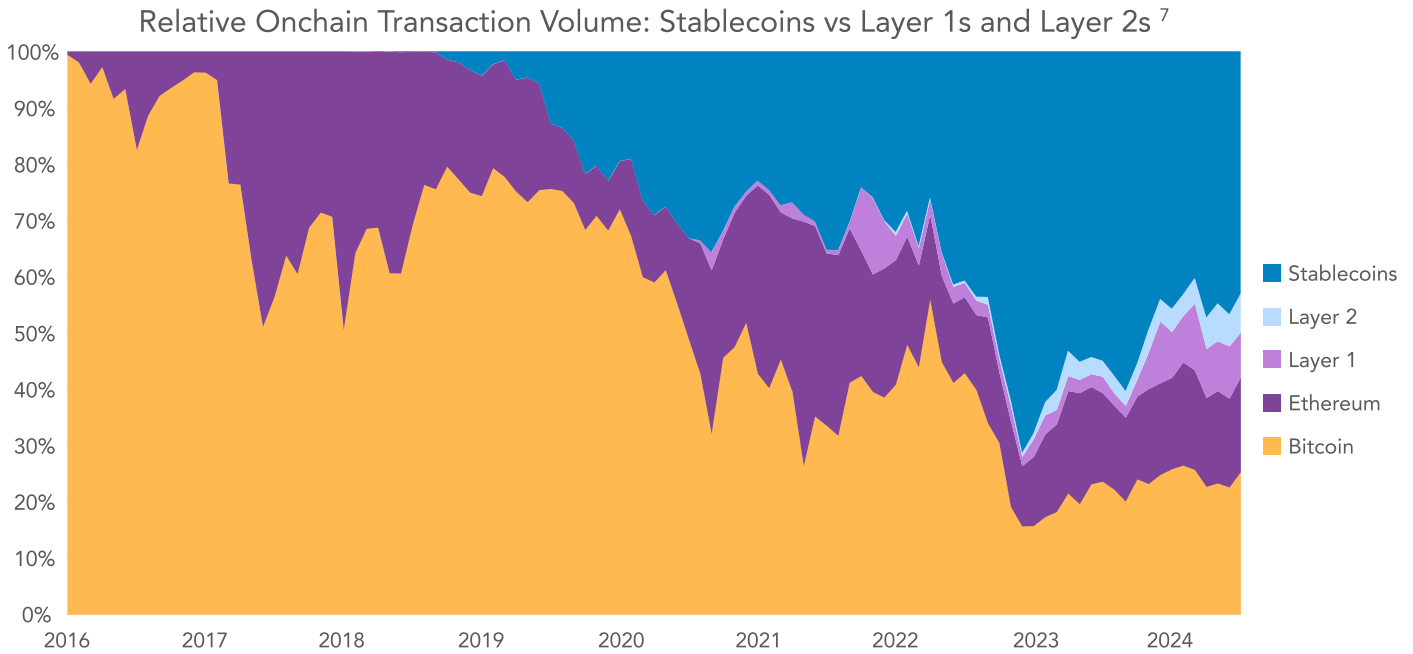
Keep in mind that the sample of other L1s and L2s is not exhaustive. Today, stablecoins account for approximately 50 percent of all value settled on public blockchains, reaching as much as 70 percent in the past.

Lastly, it remains the case that stablecoins are overwhelmingly linked to the US dollar. The second most popular currency referenced by stablecoins is the Euro, with a supply as of June 2024 of $617 million, or 0.38 percent of the overall stablecoin market. While stablecoins exist that reference the Lira, the Singapore Dollar, the Yen, and several other fiat currencies, no currency aside from the dollar or the Euro has over $100 million in stablecoins linked to it.

Stablecoin Supply Share by Asset Peg

---
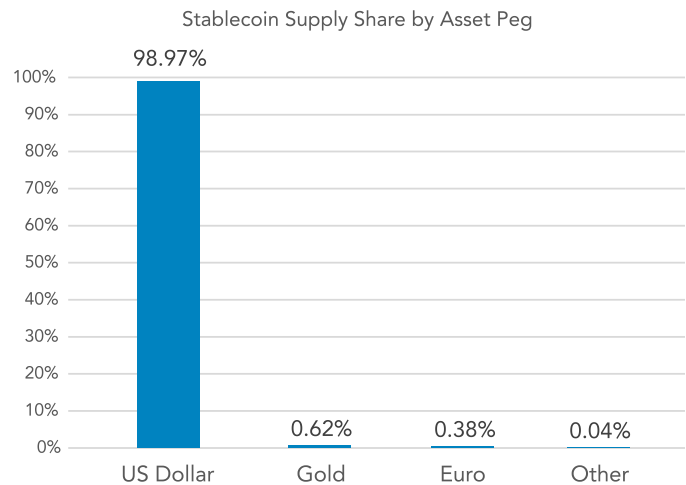
[7] L1s covered in Other: Avalanche, Solana, Tron. L2s: Arbitrum, Optimism, Base, Optimism, Polygon. Only native assets (such as SOL on Solana or AVAX on Avalanche) are counted for transaction volume figures for L1s/L2s. Note that our stablecoin estimates are deliberately conservative (See Appendix B) so stablecoin market share is likely underestimated. Stablecoin transaction volume data courtesy of Allium; other L1/L2 data courtesy of Artemis.

Bitso

Bitso is a crypto exchange with an official presence in Argentina, Brazil, Colombia, and Mexico.

- *According to Bitso's own crypto trends [report](#), Bitcoin and stablecoins dominate Latin America's buying behavior. The study, conducted in the four countries where Bitso has an official presence, shows that Bitcoin is still the preferred cryptocurrency for users. However, digital dollars are also prominent in the average user's portfolio.*

- *Led by Argentina and Colombia, stablecoins were the fastest-growing cryptocurrencies last year. The Bitso crypto trends report shows that BTC and digital dollars (USDC and USDT) were the preferred cryptocurrencies to buy in the second half of 2023*

Why stablecoins appeal to EM users:

- *Users in Latin America prefer a sense of stability from assets linked to strong fiat currencies. Inflation and exchange rates are highly volatile in Argentina and Colombia, specifically.*

- *Even though in México retail users of the platform still purchase Bitcoin more frequently than stablecoins, the use of stablecoins for remittances is gaining importance and traction amongst money transfer companies. These companies are turning to stablecoins for cost-effective and fast cross-border payments, taking advantage of regulated providers like Bitso.*

Efficiencies obtained by using stablecoins:

- *Stablecoins offer several benefits for cross-border payments. They eliminate intermediaries and enable more transparent, more efficient, and cheaper transactions.*

- *Stablecoins offer an advantage over traditional cross-border payment systems, which can take several days, can be costly, are untransparent and are limited in accessibility. One of the reasons for these inefficiencies is the participation of multiple intermediaries and currencies in the process, which add fees and delays. Stablecoins allow cross-border payments to be completed any day of the week, in only a few minutes and in a more cost-efficient manner.*

- *For digital companies with dollar costs, stablecoins provide a valuable hedge. Businesses operating in multiple countries benefit from stablecoins for managing cash flow in different currencies and making payments to employees, clients, or suppliers internationally. Investors are also attracted by the opportunity to earn yields, with Bitso offering up to 4% on stablecoins. Furthermore, crypto is increasingly being used for everyday transactions and as a means of payment. As stablecoins' advantages become more widely acknowledged across different industries, we expect to see a substantial increase in their application for cross-border payments.*

In practice, this means that when individuals in emerging markets use dollar-linked stablecoins, they are indirectly purchasing US debt instruments, such as short-term Treasurys. Regulators in certain countries with high crypto penetration, including Nigeria which is covered in our survey, have expressed concerns about the possible risks to their local currency if crypto-dollarization continues unabated.

The question of why stablecoins are so overwhelmingly dollarized remains an interesting one. The US dollar is the global reserve currency but in no other category of usage does it dominate to the same extent it does with stablecoins.

Currency Share in the Global Economy [8]
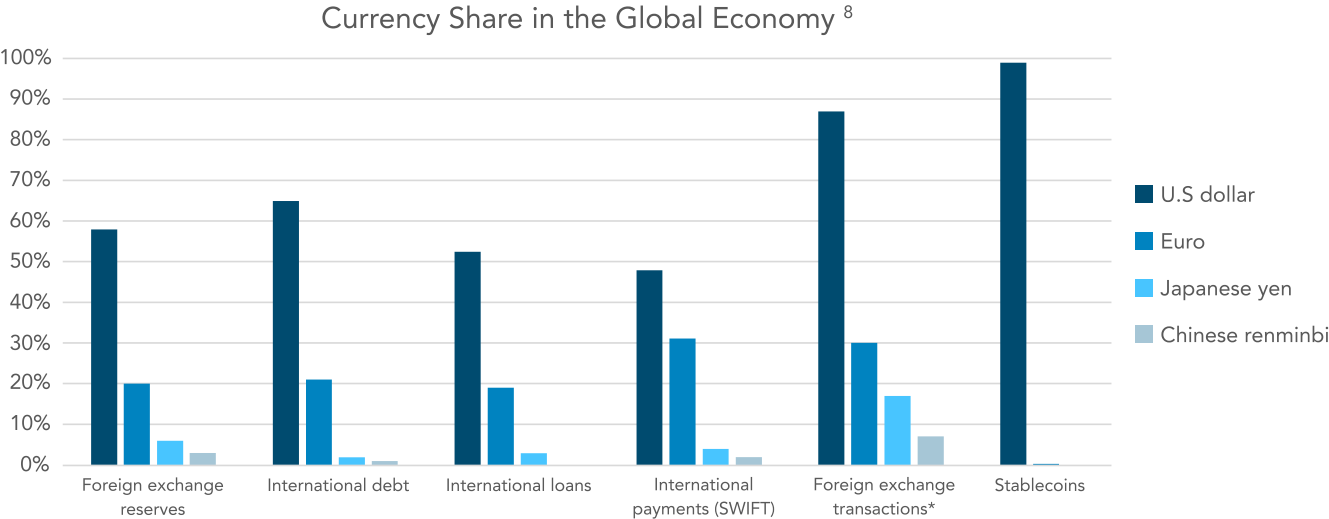
Stablecoins referencing alternative currencies have existed for years but have not gained traction. The overwhelming dollar dominance within the stablecoin sector most likely reflects the fact that most states have not erected any local barriers to using dollar stablecoins, and users simply prefer the most liquid tokens like USDT and USDC. Additionally, the dollar's strength versus most other sovereign currencies remains an incentive for crypto users to prefer USD-linked stables, even outside the U.S. It remains to be seen whether regulation could hinder dollar stablecoins and encourage the growth of local currency-backed stablecoins.

---

[8] Chart adapted from "Top Dollar" by Eswar Prasad, in Foreign Affairs Magazine (July 2024)

Survey results

We conducted a survey of approximately 500 individuals in each of Nigeria, Indonesia, Turkey, Brazil, and India for a total sample of 2541 adults. Because we did not sample the general population but limited the sample to existing crypto users, we are not able to derive an estimate for stablecoin penetration overall. Instead, we seek to better understand the way in which these individuals engage with stablecoins.

The general story told by the survey data was growing adoption of stablecoins, more frequent transactions, significant penetration in portfolios, and the emergence of heterogenous stablecoin usage beyond mere crypto trading use cases.

Key findings:

- While access to crypto (50 percent) in the most popular motivation to use stablecoins, non-crypto uses such as access to dollars (47 percent), yield generation (39 percent), and transactional purposes are popular
- Stablecoins are preferred to USD banking due to yield, efficiency, and lower likelihood of government interference
- 57 percent of users report an increase in stablecoin usage in the past year, and 72 percent believe that they will increase their stablecoin usage in the future
- In cases where Tether is preferred, the primary reasons reported are its network effects, followed by user trust, liquidity, and its track record relative to other stablecoins
- Of the non-trading use cases, currency conversion (to dollars) is the most frequently reported activity, followed by paying for goods, cross border payments, and paying or receiving a salary
- Ethereum is the most popular blockchain among sampled users, followed by Binance Smart Chain, Solana, and Tron
- The most popular wallets among respondents are Binance (exchange), followed by Trust wallet, Metamask, Coinbase wallet, crypto.com, and Phantom wallet. There is a long tail of wallets used

Stablecoin activity types:

We were most interested in determining user objectives in using stablecoins. While stablecoins initially saw traction as collateral for exchanges and a means of settlement between users and crypto exchanges, we know usage modes have since broadened.

While the most popular goal for stablecoin users in the sample was trading crypto or NFTs, other non-crypto uses were not far behind. Overall, 47 percent of respondents indicated that one of their major goals was saving money in dollars, 43 percent mentioned better currency conversion rates, and 39 percent said earning a yield. The findings are clear: non-crypto uses account for a meaningful share of stablecoin usage modes in the countries surveyed.

What are your primary goals when using stablecoins? Select all that apply

Goal	Percentage
To trade crypto or NFTs	~50%
Save money in dollars	~46%
Obtain better currency conversion rates	~43%
Earn a yield (e.g. DeFi, etc.)	~39%
Convert my local currency to dollars	~38%
Get access to the crypto economy	~38%
Take my finances into my own hands	~34%
Buy or sell goods and services	~33%
Sending money internationally	~32%
Have self-custody of my money	~29%
Make transactions that I otherwise can't make	~22%
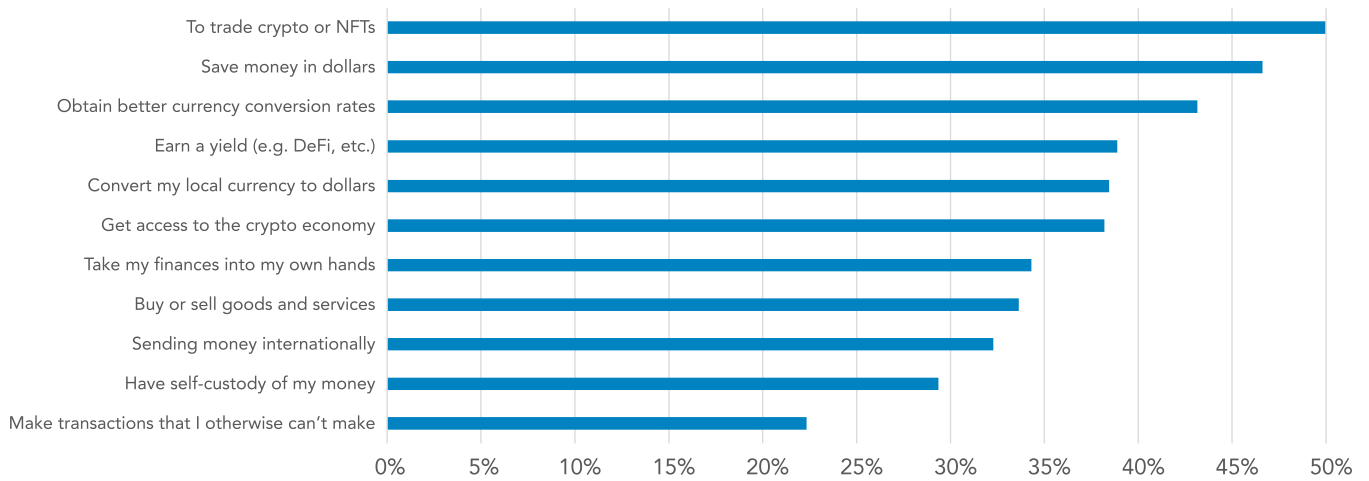
Next, we sought to understand which **non-crypto trading** stablecoin use-cases respondents had actually undertaken.

Which of these things have you done at least once? Select all that apply.

Use-case	Percentage
Convert my local currency to a stablecoin	~69%
Paid for a good or service using stablecoins	~39%
Sent or received money to a relative in a different country via stablecoins	~39%
Used stablecoins for my business	~30%
Received or paid a salary in stablecoins	~23%
None of the above	~7%
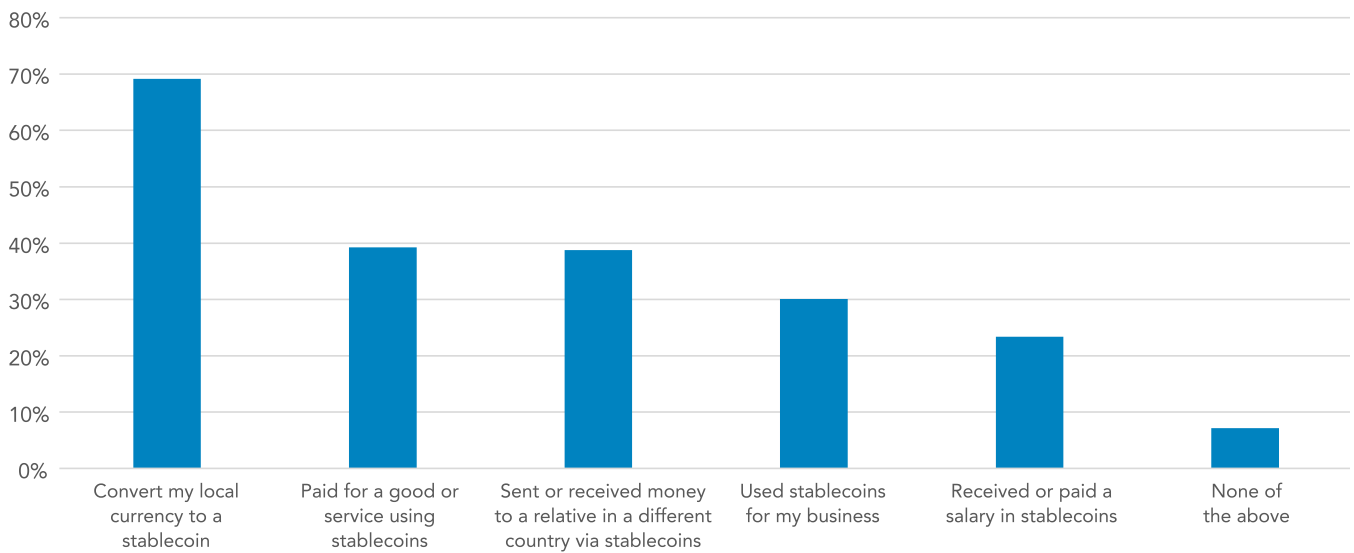
By far the most popular use was currency conversion, followed by making purchases, and cross border transactions. It's notable that a majority of respondents in all countries in the sample reported having used stablecoins for a non-crypto trading use case. Across all countries surveyed, stablecoin usage was growing over time. A majority of respondents reported growing their usage in the past year, and an even larger share indicated that they would further increase their usage in the coming year.

PINTU

Pintu is one of the largest crypto platforms in Indonesia. We offer several fiat-backed stablecoins linked to the USD, the Euro, and the Indonesian Rupiah.

Why our users prefer stablecoins

- *The majority of retail users use stablecoins mainly for the crypto & trading use-cases, including but not limited to, accessing the Web3 platforms & global exchanges and finding arbitrage opportunities.*
- *Other use-cases undertaken by a subset of users, typically our OTC clients (HNWI & corporates), include B2B payments and arbitrage.*

Efficiencies obtained by using stables versus other financial tools

- *Stablecoins are more accessible to many Indonesian users than USD banking. The registration requirements for local crypto exchanges are simpler than those required to create a USD-based bank account, so users have lower barriers to entry.*
- *Users can trade IDR to stablecoins and vice versa 24/7 as compared to some local banks' platforms which only allow users to trade IDR to other foreign currencies during banking hours.*
- *Many local banks & money changer vendors have minimum and maximum amount limitations for FX transfers, whereas Indonesian users can make transactions from/to stablecoins via crypto exchanges starting from $1 and with almost no maximum amount limitation.*

Most common usage modes

- *Pintu users can use stablecoins to earn yield through the Pintu Earn feature. Yields in Pintu Earn range from 2.5% to 6%, as compared to local banks which typically offer less than 2% APY for USD deposits.*
- *Many Pintu users use stablecoins for trading purposes. A significant portion of total trading value on Pintu consists of USD stablecoin transactions.*
- *The number of USD stablecoins onchain transfers composes almost half of the onchain transfers in and out of Pintu, while IDRT accounts for around 10% of total onchain transfers.*
- *Ethereum is still the most popular network that Pintu users rely on for onchain transfers for USD-based stablecoins (~50%), followed by Binance Chain (~25%), Tron (~8%), and Solana (~4%).*
- *USDT is favored relative to USDC in terms of the number of onchain transfers made by our users, contributing to more than 90% of the total.*

Prior year and future expected stablecoin usage
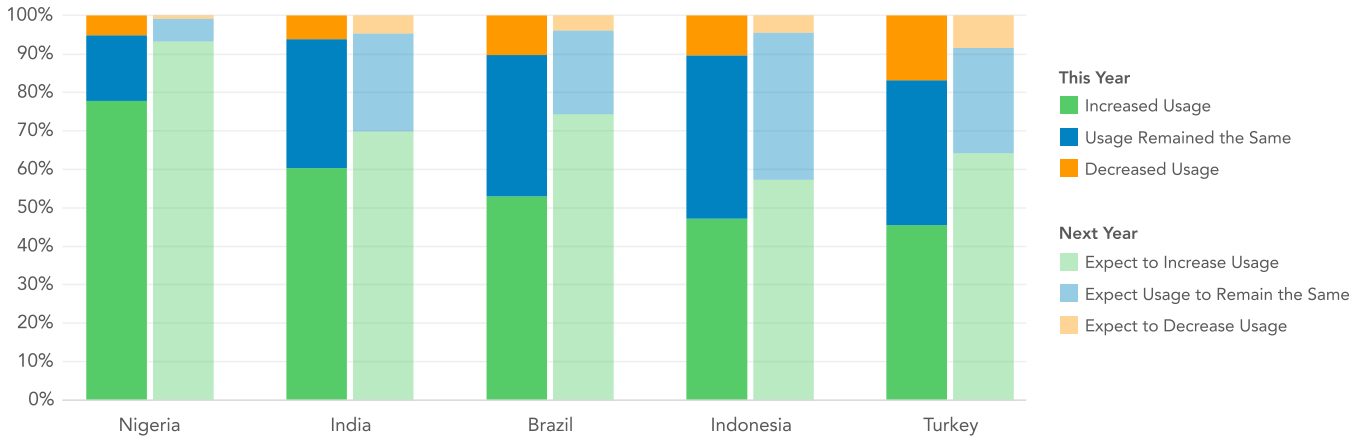
We were also interested in understanding how far stablecoins have penetrated into user portfolios. At the country level, Nigerians were well above the remainder of the sample, followed by Turkey and India. Within the sample of Indian users, respondents in the most affluent cohort also reported holding a larger share of their financial portfolios in stablecoins.

Around what percentage of your portfolio do you currently have invested in stablecoins?

	All		Brazil	Nigeria	Turkey	Indonesia	India
1% to less than 10%	38%		49%	20%	40%	47%	33%
10% to less than 25%	28%		23%	31%	25%	29%	32%
25% to less than 50%	16%		12%	25%	13%	14%	19%
50% to less than 75%	8%		5%	16%	9%	2%	6%
75% to 100%	3%		3%	5%	3%	2%	2%
Not sure	5%		6%	3%	7%	5%	6%
Prefer not to answer	2%		2%	0%	3%	2%	2%

Findings by country:

Our survey found that Nigerian users have the highest stablecoin affinity among the countries surveyed – by far. Nigerian users transact most frequently, stablecoins compose the largest share of respondent portfolios, they report the highest share of non-crypto-trading uses for stablecoins, and they maintain the highest self-reported knowledge of stablecoins.

Interestingly, the primary goals of stablecoin users differed by country. Across the entire sample, trading crypto was the most common goal for stablecoin users, yet there was variance at the country level. In Turkey, the most common objective was earning a yield, followed by trading crypto. For Indonesians it was better currency conversion rates, followed by trading crypto and saving money in dollars. For Nigerians saving money in dollars was the top objective, followed by trading crypto and obtaining better currency conversion rates.

The most active countries by stablecoin usage within the sample in order were Nigeria, India, Indonesia, Turkey, and Brazil. Stablecoin share of portfolios, Nigeria was a standout again (by a significant margin), followed by India, Turkey, Brazil, and Indonesia.

We also divided respondents into income bands to understand how affluence plays a role in stablecoin adoption. However given uneven sampling across income bands in most countries in the sample, we were only able to derive useful results for India.

The results by income for India were very clear: more affluent respondents had a greater stablecoin penetration in their portfolios, they were more prone to using stablecoins for a wider variety of use cases, including non-crypto uses cases, and they were more likely to trust stablecoins more than bank accounts.

DolarApp

At DolarApp we are building a global financial app for Latin America, using stablecoins. The most common ways clients use DolarApp include receiving payments from the US at the best rates, paying with cards internationally at the best rates, and dollarizing their savings.

The main reason why we exist is because in LatAm there is a massive demand for dollar-denominated financial services, but access to dollar banking is limited. Stablecoins are appealing to our userbase in LatAm for a variety of reasons:

- *First and foremost, because they can't easily access dollars. In Mexico, banks cannot offer an account in USD to anyone who is not living within 20km of the US border. In Colombia and Brazil, dollar banking isn't permitted at all. In Argentina, USD banking exists but it is constrained by transaction volume thresholds, and at an "official" FX rate, different to the market rate.*

- *In countries with high levels of inflation like Argentina or Venezuela, stablecoins allow people to denominate their savings in a stable currency.*

- *When it comes to cross-border transactions, the fact that you cannot hold a balance in USD at a remitter implies that whenever you receive a transfer in USD, it is converted to your local currency automatically – making it easy for incumbent banks and remittances players to hide a fee in a large spread. The moment you let people hold USD stablecoins, they can convert at their will with full awareness of the FX rates they are getting. The same logic applies to card payments.*

- *In countries with high taxes on cross border money movements such as Brazil, stablecoins offer a more favorable taxation regime than fiat USD.*

- *Lastly, because of the efficiencies derived from the fact that restrictions on fiat USD do not apply to stables – both in terms of speed of money movements (e.g. parking on blue chip bonds used for remittances in Argentina) and taxation (e.g. IOF taxes in Brazil)*

Findings by age:

Generally, results by age were as expected: stablecoin usage is higher with younger people. Younger people are more likely to have experimented with multiple different stablecoins, and they maintain a higher share of stablecoins in their overall financial portfolios.

While there were no marked age differences in most categories of usage, younger people were more likely to use stablecoins to save money in US dollars, convert their local currency to dollars, and

get access to the crypto economy as compared to older respondents. Stablecoin usage is higher in younger age brackets for all non-crypto use cases: paying for goods/services in stablecoins, sending remittances, and receiving a salary in stablecoins.

Of the respondents that noted converting their local currency to stablecoins (the most common usage in our polling), 34 percent of young people (18-24) did this activity weekly and 38 percent only monthly, compared to 15 percent on a weekly cadence and 46 percent on a monthly cadence for the oldest respondents (55+). Younger respondents also noted trusting stablecoins more compared to a USD-denominated bank account.

At Felix Pago, our mission is to empower Latinos in the US with a seamless and accessible service that makes sending money to loved ones back home as simple as sending a text. We leverage AI to offer a conversational platform so users interact with the Felix bot to send remittances. We deposit fiat to end users but we power our cross-border infrastructure with stablecoins.

Current cross-border infrastructures for these users are still outdated, dominated by banks or old-school remittance companies with burdensome, slow, and expensive services. We leverage crypto for three reasons: first, to access an open money platform via APIs; second, to have the ability to move funds instantaneously; and third, keeping costs as low as possible.

But we couldn't expose the volatility risk of crypto to our users, so we opted to use stablecoins. In general, our users wanted reliability and trustworthiness. This is why we started with USDC, because we liked the fact that it was backed by U.S. assets custodied in regulated U.S. financial institutions and regularly audited.

We solve the current problem that our users want, which is to get local currency to pay for everyday expenses. This makes off-ramping in the region one of the biggest challenges for stablecoin adoption. Having said this, Felix is making significant strides towards moving more and more stablecoins into Latin America.

Tether preference:

Tether is generally understood as the most popular stablecoin among emerging market users. We wanted to understand its enduring advantage. Users most commonly reported preferring Tether due to network effects, followed by trusting it more, and Tether maintaining the best liquidity.

Earlier you mentioned you prefer Tether to other stablecoins. Why is that? Select all that apply.
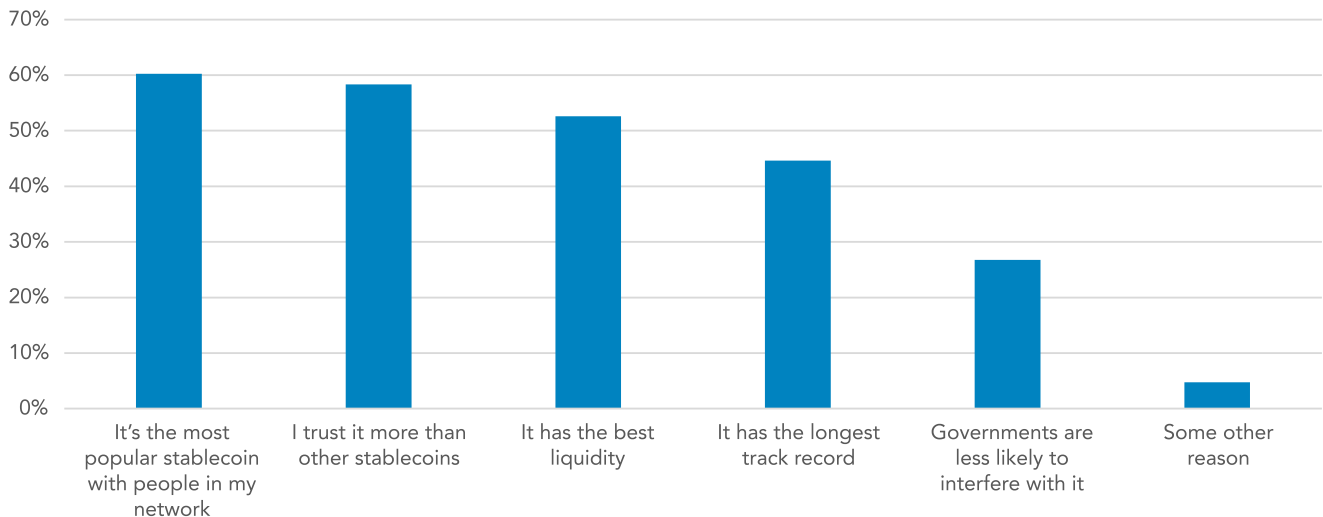
We also gave users the option to share in open-ended format what could cause them to switch from Tether to an alternative, asking "What, if anything, would make you switch from Tether to another stablecoin?" Many reported sticking with USDT out of habit:

- "Actually there is no specific reason, just habit."
- "There is no reason, I started with USDT and continue with it."
- "I started with Tether and have built trust over time, I would rather remain loyal. There is no need for change."
- "The only reason that would make me switch from Tether is when I can't be able to use it to send money to my relatives in another country."

Some users reported that they would switch if a consensus emerged around an alternative stablecoin in their networks:

- "When I can trust that a new stablecoin is popularly used for transactions as much as Tether."
- "I am very influenced by my environment in this regard. If there is something I hear about more often than Tether, I will of course try it."
- "Everyone's level of trust in stablecoins will influence me to choose the best one"
- "If there is a stablecoin that provides better service, is more useful in the market, allows transactions with lower fees, is more widespread and prestigious, I might switch."
- "If the use of other stablecoins is broader in scope for merchants"
- "Although I do not think there will be an event that can provide this trust at this stage, I would not hesitate to try it if people I trust suggest it."

A number of users also reported that they would switch from Tether if it were banned or faced government intervention. A few users also mentioned a lack of yield as a potential reason to switch to an alternative stablecoin.

Blockchains and wallets used:

Lastly, we sought to understand which blockchain networks – if any – users preferred, and which wallets they used.

Which blockchain networks, if any, have you used to transact stablecoins? Select all that apply.
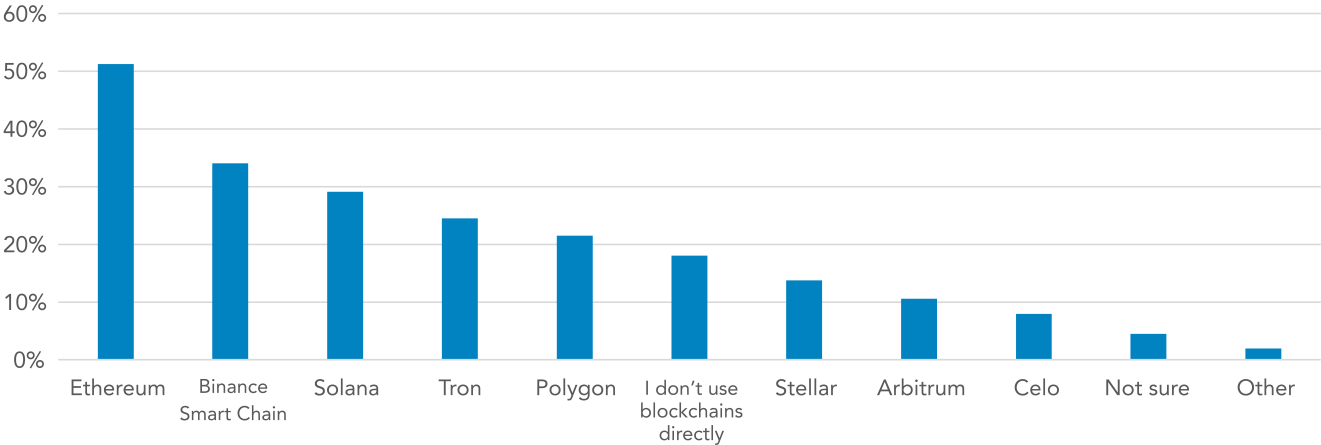
Somewhat surprisingly, Ethereum was in all geographies the most popular blockchain network, followed by Binance Chain, Solana, and Tron. This was unexpected, as Ethereum fees are consistently too high for smaller retail payments. We also gave users the option to mention that they solely transact on exchanges (certain exchanges give users the ability to make peer to peer transfers, with the transactions settling on their internal ledgers). Fully 18 percent of the sample acknowledged making stablecoin transfers in this manner. This trend of using exchanges rather than blockchains directly was also evident in our question about wallets.

The most popular noncustodial wallets were Trust Wallet, MetaMask, and Coinbase Wallet.

Among all respondents, fully half indicated using Binance exchange as a wallet, more so than any other noncustodial wallet. Notably, 39 percent of Nigerians surveyed acknowledged using Phantom wallet (primarily a Solana client).

Which blockchain wallet(s), if any, do you most commonly use? Select all that apply.

Binance Exchange — ~49%
Trust Wallet (Binance) — ~39%
MetaMask — ~27%
Coinbase Wallet — ~27%
Crypto.com — ~24%
Phantom Wallet — ~14%
BlueWallet — ~8%
SafePal — ~8%
Electrum — ~7.5%
Does not use a wallet — ~7%
Tronlink — ~5.5%
Celo Wallet — ~5.5%
Other browser wallet — ~5%
Math Wallet — ~5%
Rainbow — ~5%
Ledger — ~5%
Exodus — ~5%
Other mobile wallet — ~4.5%
Trezor — ~4%
Other HW wallet — ~0.5%
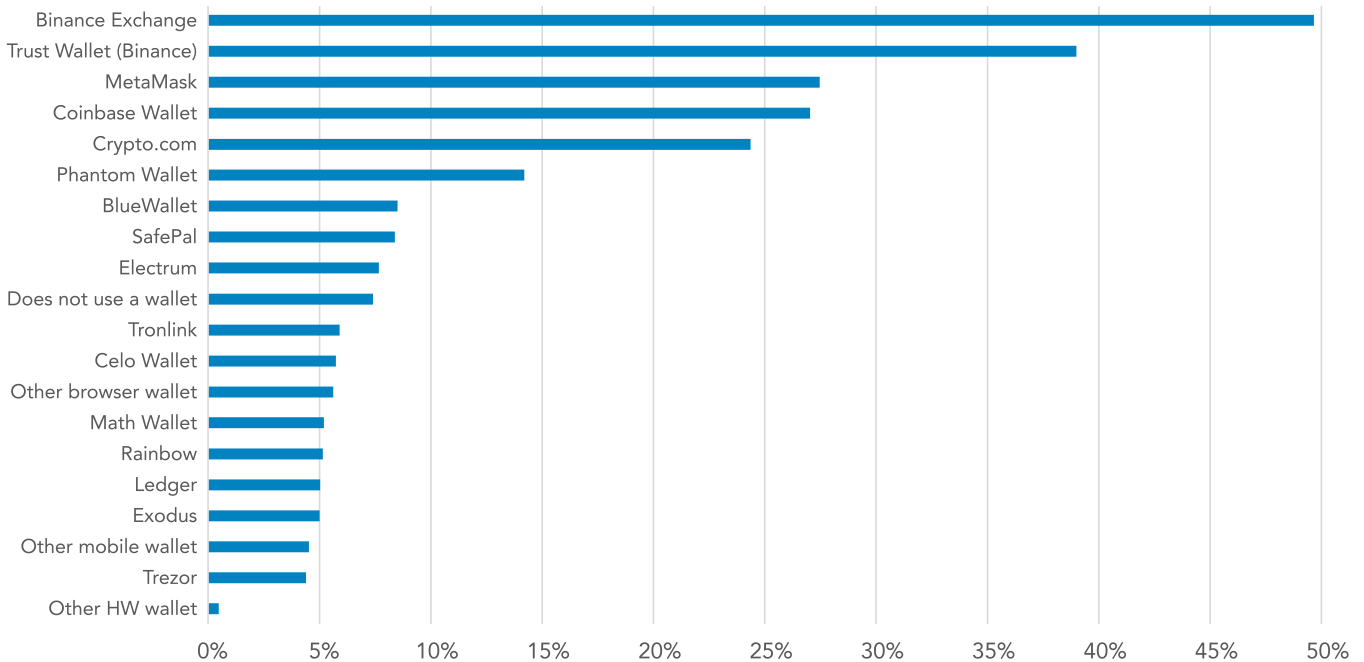
Yellow Card

Yellow Card is the largest and first licensed stablecoin on/off ramp on the African continent. We operate across 20 countries in Africa, making it easy and affordable for individuals and businesses to make international payments, manage their treasury, and access hard currencies.

Stablecoins solve inherent issues that exist with the currency and banking system in many countries across Africa. 70% of African countries have a FX shortage that has been declared a crisis. If you have a debit card at a local bank in most countries, you cannot use it internationally. The bank cannot make international payments for you. There is very limited access to USD.

As a result, people and businesses have turned to stablecoins to keep their payments flowing, imports coming in, business alive, and family supported. Stablecoins are a critical piece of economies like Nigeria. They allow individuals and businesses to access international USD payments without hard currency having to leave the country.

In Africa, it isn't about stables vs. other financial tools. It is stables or nothing. There is a massive shortage of hard currency across the continent, with many countries facing severe liquidity crunches.

The most common usage modes for stablecoins among our customers are international payments and treasury management. Yellow Card serves banks, FinTechs, manufacturers, importers, exporters, retailers, food producers, remittance companies, and everyone else that deals with local African fiats. There is no liquidity for hard currency, so businesses from all industries have turned to stablecoins to find that liquidity, make their payments, and keep their business alive.

Africa is ground zero for real-world, practical use cases for stablecoins, crypto, and blockchain technology more broadly.

Conclusion

In this study, we demonstrated first from an onchain perspective that stablecoin usage is growing, whether in terms of monthly active addresses, aggregate supply, or value settled. In particular, our new transaction value estimates establish stablecoins as a meaningful settlement medium rivaling established transfer networks, while avoiding the overestimates that have plagued onchain figures in the past.

Our survey results contradict the common belief that stablecoins are exclusively used as a tool for the speculative trading of cryptoassets. Forty-seven percent of crypto users surveyed list saving in dollars as their stablecoin objective, 43 percent cited efficient currency conversion, and 39 percent said yield generation. Gaining access to crypto exchanges remains the top use case for those surveyed, but a long tail or ordinary (non crypto) economic activities is evident as well.

When asked about non-crypto stablecoin activities, the most popular use of stablecoins is currency substitution (69 percent), followed by paying for goods and services (39 percent), and cross-border payments (39 percent). it is abundantly clear that stablecoins have evolved from mere trading collateral to a general-purpose digital dollar instrument in the countries surveyed.

What's more, the vast majority (approximately 99 percent) of stablecoins reference the US dollar. Discussions of stablecoin regulation in the U.S. cannot omit the fact that a great number of individuals and firms in emerging markets rely on these networks for savings, cross-border payments, remittances, and corporate cash management. In almost all of the countries surveyed, these stablecoins are increasingly serving as a substitute to dollar banking, which is sparsely available. The potential welfare benefits of efficient access to alternative hard currencies for billions of users in emerging markets must have a place in the discussion of the merits of stablecoins.

Appendix A: Full Survey Results

Around what percentage of your portfolio do you currently have invested in stablecoins? Select one response.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
1% to less than 10%	38%	49%	20%	40%	47%	33%	33%	34%	40%	45%	40%
10% to less than 25%	28%	23%	31%	25%	29%	32%	26%	28%	26%	32%	30%
25% to less than 50%	16%	12%	25%	13%	14%	19%	22%	18%	17%	10%	13%
50% to less than 75%	8%	5%	16%	9%	2%	6%	10%	9%	7%	4%	7%
75% to 100%	3%	3%	5%	3%	2%	2%	3%	4%	3%	3%	2%
Not sure	5%	6%	3%	7%	5%	6%	4%	6%	6%	4%	6%
Prefer not to answer	2%	2%	0%	3%	2%	2%	1%	2%	2%	1%	2%

How does your usage of stablecoins compare to last year? Has your usage…? Select one response.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Increased	57%	53%	78%	45%	47%	60%	60%	59%	57%	53%	50%
Remained the same	34%	37%	17%	38%	42%	34%	32%	32%	33%	35%	40%
Decreased	10%	10%	5%	17%	10%	6%	8%	9%	10%	12%	11%

How do you anticipate that your usage of stablecoins will change in the next year? Will your usage…? Select one response.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Increase	72%	74%	93%	64%	57%	70%	74%	72%	70%	70%	73%
Remain the same	24%	22%	6%	27%	38%	25%	21%	23%	26%	24%	23%
Decrease	4%	4%	1%	8%	4%	5%	5%	4%	4%	6%	4%

What is your overall opinion on these stablecoins? Select one answer per row. (USDT)

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Very favorable	57%	47%	75%	51%	49%	57%	51%	59%	60%	58%	53%
Somewhat favorable	28%	35%	18%	29%	35%	29%	32%	28%	24%	25%	36%
Neither favorable nor unfavorable	12%	15%	5%	17%	14%	11%	12%	10%	15%	15%	8%
Somewhat unfavorable	1%	3%	1%	2%	2%	1%	3%	2%	1%	0%	2%
Very unfavorable	0%	0%	0%	0%	0%	1%	1%	1%	0%	1%	0%
I don't have an opinion on this brand	1%	0%	1%	1%	0%	1%	1%	1%	0%	1%	1%

What is your overall opinion on these stablecoins? Select one answer per row. (USDC)

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Very favorable	43%	37%	51%	33%	37%	48%	42%	42%	52%	40%	31%
Somewhat favorable	39%	40%	36%	45%	45%	31%	38%	39%	36%	41%	42%
Neither favorable nor unfavorable	14%	19%	9%	15%	14%	16%	16%	16%	11%	14%	13%
Somewhat unfavorable	2%	3%	1%	2%	4%	2%	2%	3%	1%	0%	9%
Very unfavorable	1%	1%	1%	0%	0%	1%	1%	1%	0%	2%	2%
I don't have an opinion on this brand	1%	0%	1%	5%	0%	2%	2%	0%	1%	3%	2%

What are your primary goals when using stablecoins? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
To trade crypto or NFTs	50%	44%	58%	51%	49%	48%	48%	49%	51%	52%	49%
Save money in dollars	47%	40%	64%	37%	47%	46%	49%	51%	49%	39%	39%
Obtain better currency conversion rates	43%	33%	50%	35%	54%	44%	43%	45%	42%	41%	44%
Earn a yield (e.g. DeFi, etc.)	39%	42%	38%	55%	27%	33%	39%	40%	38%	40%	36%
Convert my local currency to dollars	38%	31%	51%	32%	39%	40%	42%	41%	39%	32%	35%
Get access to the crypto economy	38%	35%	49%	28%	39%	41%	41%	42%	38%	34%	29%
Take my finances into my own hands	34%	29%	34%	29%	35%	44%	37%	35%	36%	33%	26%
Buy or sell goods and services	34%	28%	48%	21%	33%	38%	38%	34%	32%	30%	32%
Sending money internationally	32%	23%	45%	19%	39%	36%	32%	36%	32%	28%	28%
Have self-custody of my money	29%	24%	31%	27%	33%	32%	30%	29%	30%	27%	32%
Make transactions that I otherwise can't make	22%	27%	28%	17%	16%	24%	24%	22%	23%	17%	26%

You mentioned that you use stablecoins for savings. Over the past year, has your usage of stablecoins for savings…? Select one response.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Increased	67%	59%	83%	60%	60%	66%	70%	70%	67%	60%	62%
Remained the same	27%	34%	14%	30%	35%	31%	26%	25%	26%	36%	32%
Decreased	5%	8%	4%	10%	4%	3%	5%	5%	7%	5%	6%

Which of these things have you done at least once? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Convert my local currency to a stablecoin	69%	67%	77%	68%	75%	58%	69%	70%	68%	70%	67%
Paid for a good or service using stablecoins	39%	35%	54%	26%	33%	49%	46%	41%	41%	30%	35%
Sent or received money to a relative in a different country via stablecoins	39%	29%	57%	19%	40%	49%	40%	41%	40%	36%	33%
Used stablecoins for my business	30%	33%	38%	19%	30%	32%	32%	31%	32%	25%	28%
Received or paid a salary in stablecoins	23%	18%	25%	13%	24%	37%	29%	27%	21%	18%	16%
None of the above	7%	7%	1%	15%	5%	8%	5%	6%	8%	9%	9%

Earlier you mentioned that you prefer Tether to other stablecoins. Why is that? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
It's the most popular stablecoin with people in my network	60%	63%	78%	38%	63%	65%	65%	58%	64%	56%	59%
I trust it more than other stablecoins	58%	50%	76%	51%	47%	59%	64%	58%	57%	53%	63%
It has the best liquidity	53%	58%	48%	38%	70%	62%	43%	55%	58%	54%	47%
It has the longest track record	45%	38%	42%	46%	38%	58%	41%	51%	48%	42%	30%
Governments are less likely to interfere with it	27%	25%	25%	28%	21%	36%	27%	30%	23%	29%	22%
Some other reason	5%	8%	4%	5%	5%	6%	3%	4%	5%	8%	5%

What are the reasons you use stablecoins as opposed to a USD bank account? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
I earn a better yield with stablecoins	45%	38%	59%	36%	47%	45%	48%	44%	46%	45%	41%
Stablecoins maintain a more stable value over time	45%	32%	60%	33%	49%	49%	42%	46%	46%	44%	43%
Stablecoins are more efficient	41%	25%	47%	30%	53%	49%	39%	44%	42%	39%	38%
Governments are less likely to interfere with stablecoins	39%	42%	38%	35%	36%	45%	44%	39%	36%	36%	44%
I trust stablecoins more	38%	33%	52%	27%	30%	51%	43%	43%	37%	33%	29%
Stablecoins are less impacted by inflation	38%	33%	38%	36%	36%	47%	42%	37%	38%	36%	40%
Stablecoins are easier to access than a USD bank account	34%	23%	51%	25%	38%	32%	31%	31%	39%	34%	34%
Stablecoins are backed by assets	27%	21%	26%	24%	33%	34%	30%	31%	27%	23%	20%
Some other reason	2%	3%	1%	3%	1%	0%	1%	1%	2%	3%	1%

Which blockchain networks, if any, have you used to transact stablecoins? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Ethereum	51%	49%	57%	41%	53%	56%	49%	53%	54%	49%	47%
BSC	34%	19%	51%	27%	32%	42%	37%	36%	36%	30%	27%
Solana	29%	21%	54%	19%	25%	27%	39%	30%	26%	25%	23%
Tron	24%	10%	33%	24%	21%	34%	26%	27%	23%	23%	21%
Polygon	22%	17%	22%	10%	25%	34%	25%	25%	20%	18%	16%
I don't use blockchains directly, but instead make transfers on exchanges like Binance	18%	21%	10%	29%	18%	12%	16%	16%	17%	20%	26%
Stellar	14%	9%	17%	11%	12%	19%	17%	15%	15%	9%	8%
Arbitrum	11%	7%	9%	10%	11%	15%	12%	13%	10%	7%	9%
Celo	8%	9%	7%	3%	6%	14%	11%	9%	7%	4%	6%
Not sure	4%	10%	1%	5%	4%	2%	5%	4%	3%	6%	5%
Other	2%	2%	3%	2%	2%	1%	2%	1%	2%	3%	2%

How often do you buy, sell, or trade stablecoins on the blockchain network(s) you currently use? Select one response.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Daily	12%	8%	17%	13%	8%	12%	11%	13%	12%	11%	10%
Weekly	30%	24%	42%	25%	25%	35%	34%	31%	32%	25%	26%
Monthly	33%	33%	27%	37%	37%	29%	29%	32%	34%	35%	36%
Semi-annually	18%	18%	12%	17%	25%	15%	16%	18%	16%	19%	20%
Hardly ever	8%	17%	3%	8%	5%	8%	9%	7%	7%	10%	9%

Which blockchain wallet(s), if any, do you most commonly use? Select all that apply.

	All	Country					Age Range				
		Brazil	Nigeria	Turkey	Indonesia	India	18-24	25-34	35-44	45-54	55+
Binance Exchange	50%	43%	67%	49%	37%	53%	52%	51%	50%	48%	43%
Trust Wallet (Binance)	39%	14%	68%	27%	47%	39%	41%	42%	41%	34%	31%
MetaMask	27%	20%	38%	18%	34%	29%	30%	28%	27%	25%	27%
Coinbase Wallet	27%	31%	32%	18%	25%	30%	27%	30%	26%	26%	23%
Crypto.com	24%	29%	21%	16%	23%	33%	29%	28%	23%	18%	20%
Phantom Wallet	14%	7%	39%	6%	7%	13%	21%	16%	11%	11%	12%
BlueWallet	9%	7%	6%	8%	7%	15%	13%	10%	7%	6%	5%
SafePal	8%	8%	6%	3%	8%	17%	12%	10%	7%	7%	4%
Electrum	8%	6%	6%	6%	7%	13%	12%	9%	7%	4%	6%
I do not use a blockchain wallet	7%	13%	1%	11%	7%	5%	5%	6%	6%	11%	11%
Celo Wallet	6%	5%	7%	3%	4%	9%	8%	8%	3%	3%	5%
Some other browser wallet	6%	5%	7%	5%	8%	4%	5%	4%	6%	7%	8%
Tronlink	6%	3%	9%	3%	6%	9%	7%	7%	3%	7%	5%
Math Wallet	5%	3%	5%	2%	4%	12%	6%	7%	5%	3%	4%
Rainbow	5%	4%	4%	4%	3%	11%	8%	7%	4%	2%	2%
Ledger	5%	3%	4%	5%	4%	9%	6%	6%	4%	3%	4%
Exodus	5%	4%	5%	4%	4%	8%	7%	6%	4%	4%	3%
Some other mobile wallet	5%	2%	5%	4%	8%	3%	4%	2%	5%	6%	7%
Trezor	4%	4%	4%	1%	3%	9%	6%	5%	4%	3%	3%
Some other hardware wallet	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	1%

Appendix B: De-noising methodology for stablecoin settlement value estimates

The goal of this report is to break down the use cases of stablecoins, across all sectors. Stablecoins are used for a wide range of sources, including payments, remittances, B2B payments, trading and speculation. We acknowledge that not all volume for stablecoins should be counted given the way smart contracts execute transactions, exchanges move funds, and MEV bots deploy capital. Given these sources of upwards bias, we decided to create a more conservative estimate of stablecoin settlement volume.

Removing Duplicates

Our first goal is to measure the "intent" of the stablecoin transaction. Complex arbitrage or lending transactions often have a significant amount of stablecoin transactions that interact with multiple entities which duplicate volume figures if interpreted naively. We look to take the maximum stablecoin transferred in each transaction which serves as a best guess of the "intent" of the transaction.

A prime example is the figure below, where an address originates a complex swap transaction that engages with numerous exchanges and flash loans. In this example, only the highest single USDT transaction would be counted, despite USDT being transacted in multiple forms of swap, repayment and loan transactions.

Sample Complex Transaction
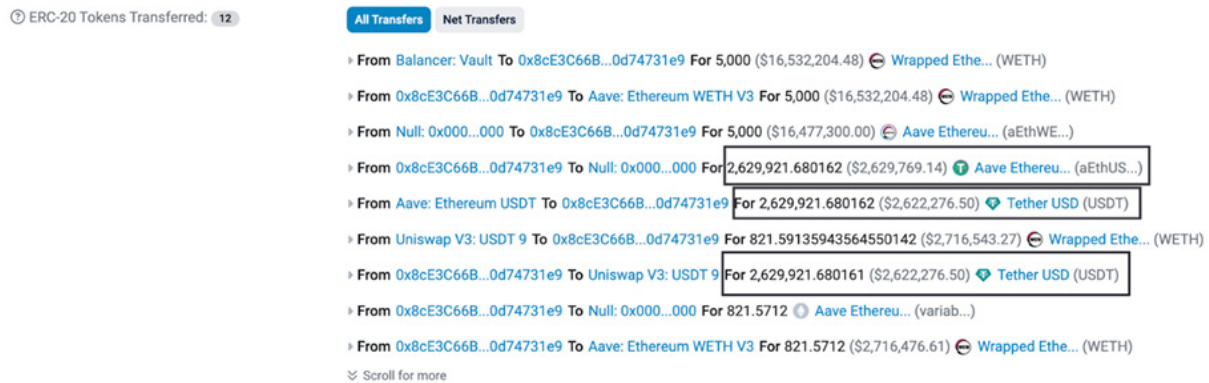
Removing Duplicate Exchange Activity

Given the nature of how crypto exchanges operate, they tend to create stablecoin transaction volume. The biggest example is deposit wallets making multiple transactions for the same intent. When a user deposits funds onto an exchange, they are first deposited into a "deposit wallet", and then are transferred again into a hot wallet. The transaction is counted twice, even though value is only meaningfully changing hands once. Our approach aims to remove deposit -> hot wallet transactions. We also exclude any "intra-exchange" transactions. For example, we aim to exclude transactions such as Binance Hot Wallet 3 sending stablecoins to Binance Hot Wallet 14.

Removing Known MEV

Additionally, we exclude known MEV bots and transactions. We acknowledge MEV is a significant driver of blockchain revenue and economic activity. However, the amount of stablecoin transfer volume generated by MEV bots far exceeds the MEV profits. For example, one MEV bot in April generated billions of dollars in transfer volume in DAI, while generating far less in returns. Solana arbitrage transactions often utilize tens of millions of dollars in order to earn less than a dollar of profit. We do not claim to have removed all MEV, as addresses often have long tail of MEV opportunities that are not immediately obvious.

Inorganic User Filter

In our analysis, we were able to classify roughly 50% of stablecoin transactions into use cases such as P2P, DeFi, Bridges, NFT purchases, etc. For those transactions we were unable to classify, we applied additional nominal filters to exclude potentially inorganic activity. Specifically, within the unlabeled transactions, only those that have been sent by an account that has initiated less than 1,000 stablecoin transactions and less than $10M in transfer volume in the preceding 30 days are counted. This removes various bot and MEV activity that we were otherwise unable to classify.

So to summarize, we begin by de-duplicating DeFi transactions by isolating the "intent" of the transaction and ignoring the remainder; then for the roughly 50 percent of stablecoin transactions we are able to ascribe to specific types of agents, we apply agent-based filters (such as excluding exchange-drive sources of churn or bias from MEV bots), and then for the remainder of transactions, we apply a heuristic-based filter which further refines our estimate.

Filters and methodology utilized for this report were agreed on collaboratively by Artemis, Allium, Castle Island, and Visa.

Legal Information and Disclaimer

The commentary contained in this document represents the personal views of its authors and does not constitute the formal view of Brevan Howard or Castle Island Ventures. It does not constitute investment research and should not be viewed as independent from the trading interests of the Brevan Howard and Castle Island Ventures funds. The views expressed in the document are not intended to be and should not be viewed as investment advice. This document does not constitute an invitation, recommendation, solicitation or offer to subscribe for or purchase any securities, investments, products or services, or any investment fund managed by Brevan Howard, Castle Island Ventures, or any of their affiliates. Unless expressly stated otherwise, the opinions are expressed as at the date published and are subject to change. No obligation is undertaken to update any information, data or material contained herein.