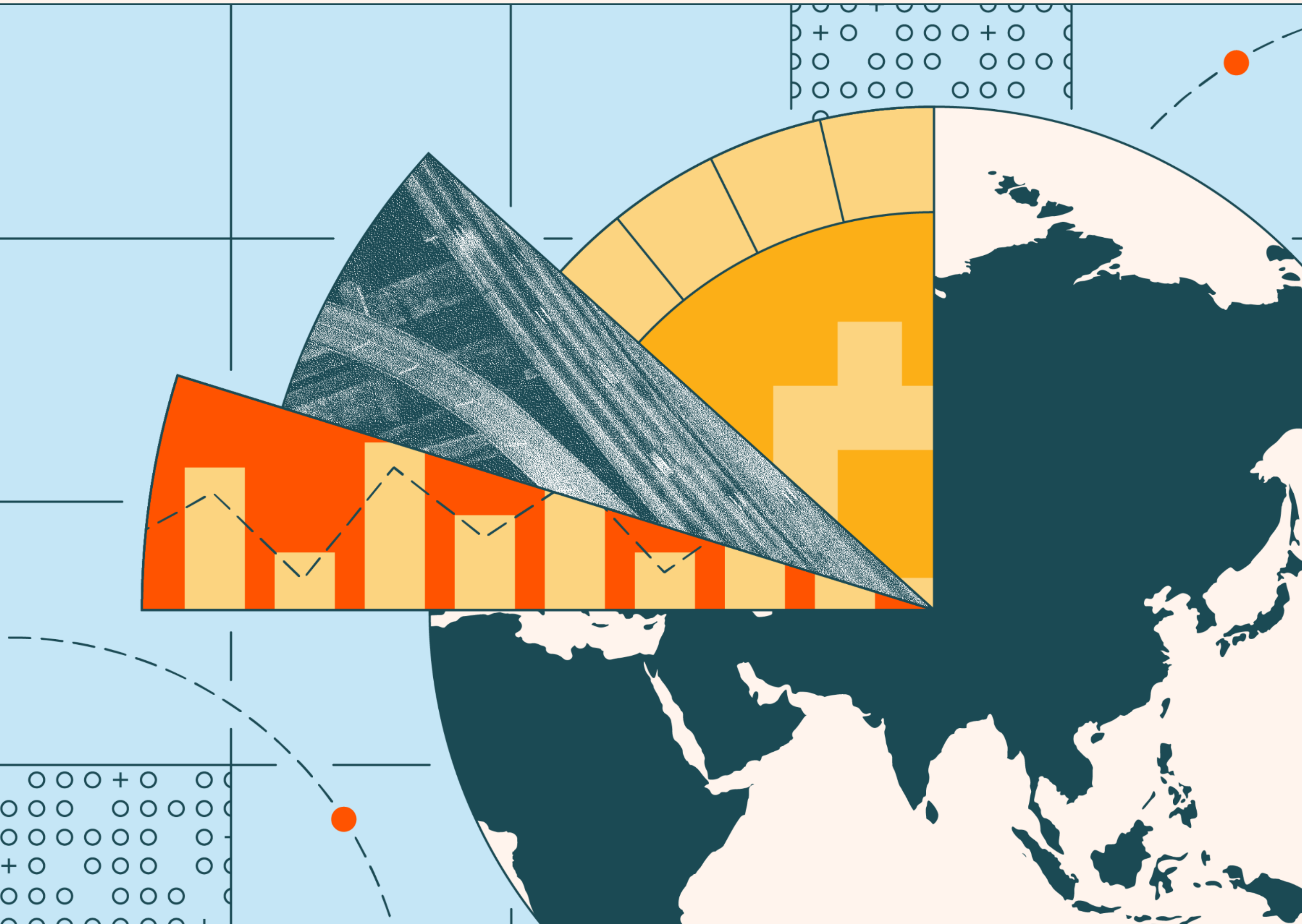
Chainalysis

The 2023 Geography of Cryptocurrency Report

Everything you need to know about regional trends in crypto adoption

OCTOBER 2023



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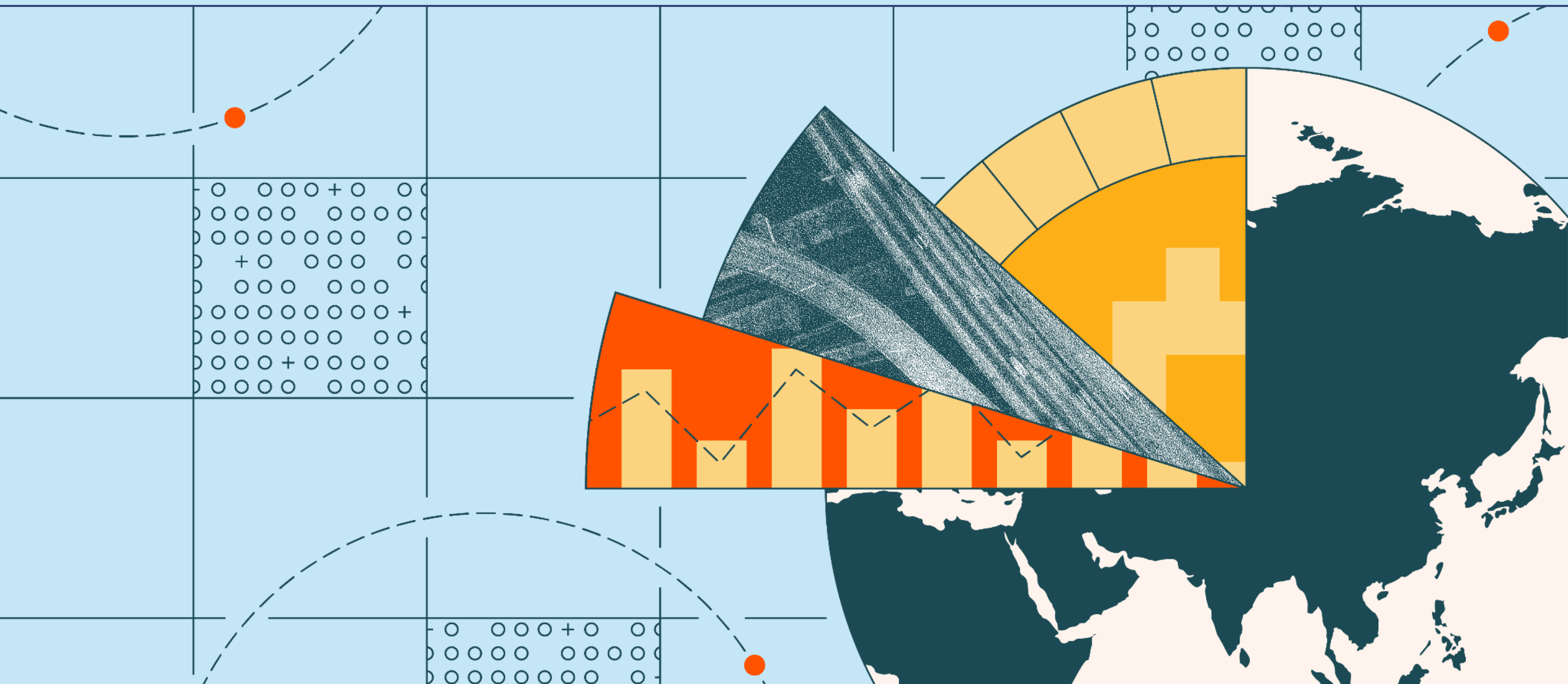


Central & Southern Asia Leading the Way in Grassroots Crypto Adoption

We're excited to unveil the fourth annual Chainalysis Global Crypto Adoption Index. The goal of the index is simple: We combine on-chain data and real-world data to measure which countries are leading the world in grassroots crypto adoption. Grassroots crypto adoption isn't about which countries have the highest raw transaction volumes — anyone could probably guess that the biggest, wealthiest countries are far ahead there. Instead, we want to highlight the countries where average, everyday people are embracing crypto the most. To do that, we've designed the Global Crypto Adoption Index to identify countries where the most people are putting the greatest share of their wealth into cryptocurrency. We'll explain the full methodology below, then provide the top 20 countries on our index, along with a few key takeaways.

Our crypto adoption index methodology

The Global Crypto Adoption Index is made up of five sub-indexes. Each of those sub-indexes is based on countries' usage of different types of cryptocurrency services. We rank all 155 countries for which we have sufficient data on each sub-index, weight the rankings by characteristics like population size and purchasing power, take the geometric mean of each country's ranking in all five, and then normalize that final number on a scale of 0 to 1 to give every country a score that determines the overall rankings. The closer the country's final score is to 1, the higher the rank.

In order to calculate our sub-indexes, we estimate countries' transaction volumes for different types of cryptocurrency services and protocols based on the web traffic patterns of those services' and protocols' websites. We acknowledge that web traffic data isn't perfect. Some crypto users are almost certainly employing VPNs and other tools that mask online activity. But given that our index takes into account hundreds of millions of transactions and 13 billion web visits, we're confident that any misattributed transaction volume due to VPNs is too small to compromise the data as a whole. We also vet our index with local crypto experts and operators around the world, giving us more confidence in this methodology.

Below is a description of each sub-index, how it's calculated, and why we believe it's valuable for measuring grassroots crypto adoption.

On-chain cryptocurrency value received at centralized exchanges, weighted by purchasing power parity (PPP) per capita

The goal of this sub-index is to rank each country by total cryptocurrency activity occurring on centralized crypto exchanges, and weight the rankings to favor countries where that amount is more significant based on the wealth of the average person in that country. We calculate this by estimating the total cryptocurrency received on-chain by users of centralized services in each country, and weighting that value based on PPP per capita, which is a measure of the country's wealth per resident. The higher the ratio of on-chain value received to PPP per capita, the higher the ranking. In other words, if two countries received equal amounts of cryptocurrency at centralized services, the country with lower PPP per capita would rank ahead.

On-chain retail value received at centralized exchanges, weighted by PPP per capita

The goal of this metric is to measure the activity of non-professional, individual cryptocurrency users at centralized services, based on how much cryptocurrency they're transacting compared to the wealth of the average person. We do this by measuring the amount of cryptocurrency received at centralized services by users in each country, similar to the above, but only counting value received in retail-sized transactions, which we designate as transactions under $10,000 USD worth of cryptocurrency. We then rank each country according to this metric but weight it to favor countries with a lower PPP per capita.

Peer-to-peer (P2P) exchange trade volume, weighted by PPP per capita and number of internet users

P2P trade volume makes up a significant percentage of all cryptocurrency activity in emerging markets. For this sub-index, we rank countries by their P2P trade volume and weight it to favor countries with lower PPP per capita and fewer internet users, the goal being to highlight countries where more residents are putting a larger share of their overall wealth into P2P cryptocurrency transactions.

On-chain cryptocurrency value received from DeFi protocols, weighted by PPP per capita

DeFi (decentralized finance) is the cutting edge of cryptocurrency. Given the sector's importance to innovation in crypto, we want our adoption index to highlight countries where users are conducting a disproportionately high share of their financial activity using DeFi protocols. For this sub-index, we rank countries by their DeFi transaction volume, and weight the rankings to favor countries with lower PPP per capita.

On-chain retail value received from DeFi protocols, weighted by PPP per capita

We want our index to highlight the DeFi activity of non-professional, individual cryptocurrency users, just as we do for centralized services. So, this sub-index ranks each country by DeFi transaction volume carried out in retail-sized transfers, weighted to favor countries with lower PPP per capita.

The 2023 Global Crypto Adoption Index Top 20

See the full index on page 85

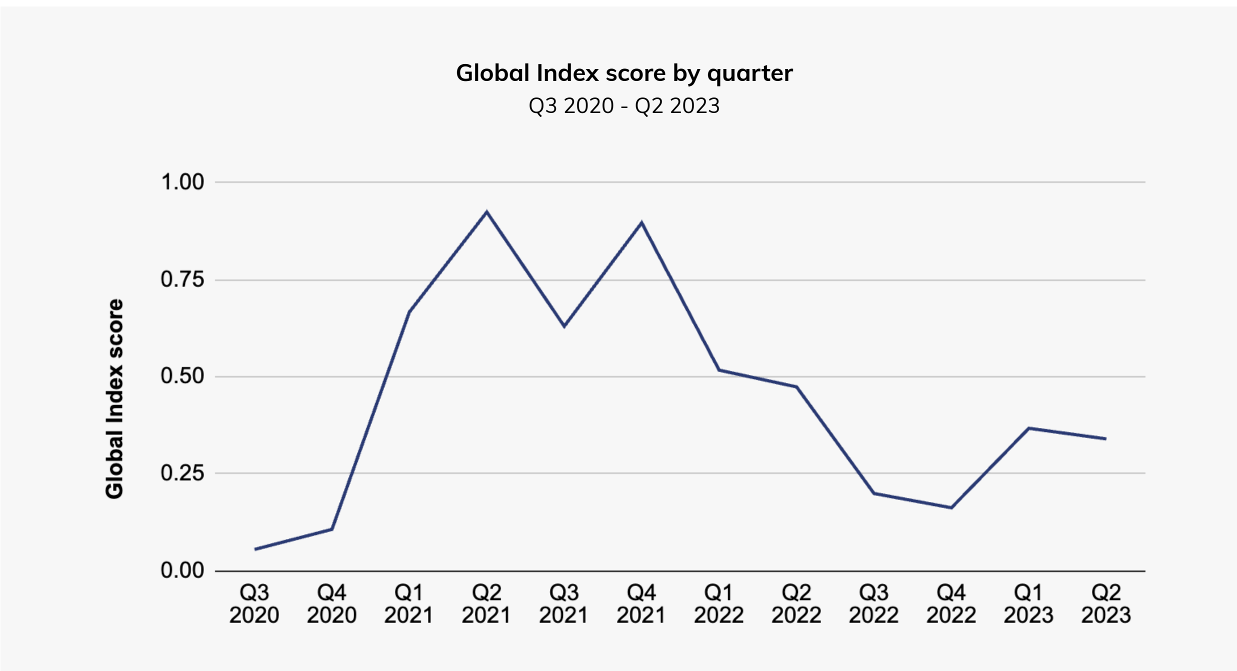
Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
India	Central & Southern Asia and Oceania	1	1	1	5	1	1
Nigeria	Sub-Saharan Africa	2	3	2	1	4	4
Vietnam	Central & Southern Asia and Oceania	3	4	4	2	3	3
United States	North America	4	2	8	12	2	2
Ukraine	Eastern Europe	5	5	3	11	10	10
Philippines	Central & Southern Asia and Oceania	6	6	6	19	7	7
Indonesia	Central & Southern Asia and Oceania	7	13	13	14	5	5
Pakistan	Central & Southern Asia and Oceania	8	7	7	9	20	20
Brazil	Latin America	9	9	11	15	11	11
Thailand	Central & Southern Asia and Oceania	10	8	15	44	6	6
China	Eastern Asia	11	10	5	13	23	23
Turkey	Middle East & North Africa	12	11	9	35	12	12
Russia	Eastern Europe	13	12	10	36	9	9
United Kingdom	Central, Northern, & Western Europe	14	15	20	38	8	8
Argentina	Latin America	15	14	12	29	19	19
Mexico	Latin America	16	17	18	30	16	16

Bangladesh	Central & Southern Asia and Oceania	17	18	19	33	22	22
Japan	Eastern Asia	18	22	21	49	18	18
Canada	North America	19	25	23	62	14	14
Morocco	Middle East & North Africa	20	27	25	21	26	26

The first key takeaway here is that the Central & Southern Asia and Oceania (CSAO) region dominates the top of the index, with six of the top ten countries located in the region. As we explore later in the report, the circumstances driving adoption in each CSAO country are unique, which leads to different usage trends and breakdowns of most popular services.

Global adoption is down, but not in one crucial subset of the world

There's no sugarcoating it: Worldwide grassroots crypto adoption is down. We can see this on the chart below, where we apply our Adoption Index methodology globally by summing all 155 countries' index scores for each quarter from Q3 2020 to the present, and re-index them again to show adoption growth over time across the world.

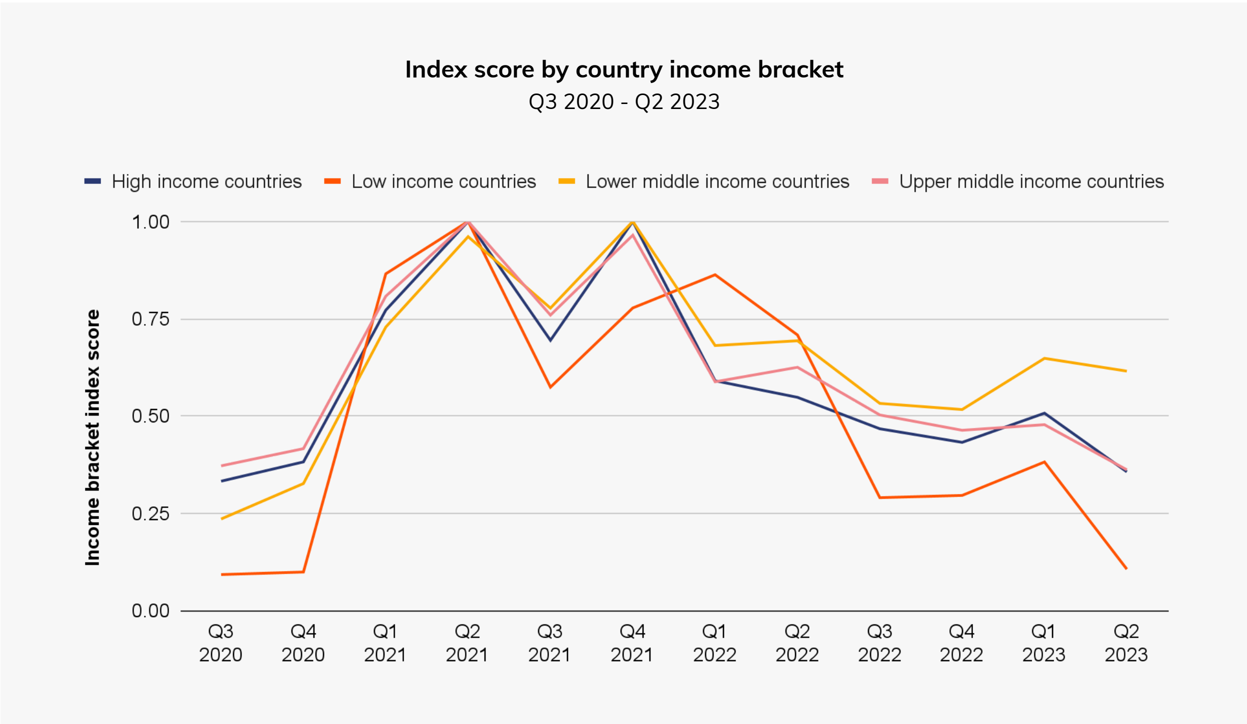


While there's been a marked recovery since the doldrums of late 2022, around the time FTX imploded, grassroots adoption is still well off its all-time highs.

But that isn't true everywhere. More specifically, there's one crucial segment of countries where grassroots adoption has seen a much stronger recovery than anywhere else: Lower middle income (LMI) countries. LMI is one of four designations used by the World Bank to classify countries by wealth level, based on gross national income (GNI) per capita. Those categories are as follows:

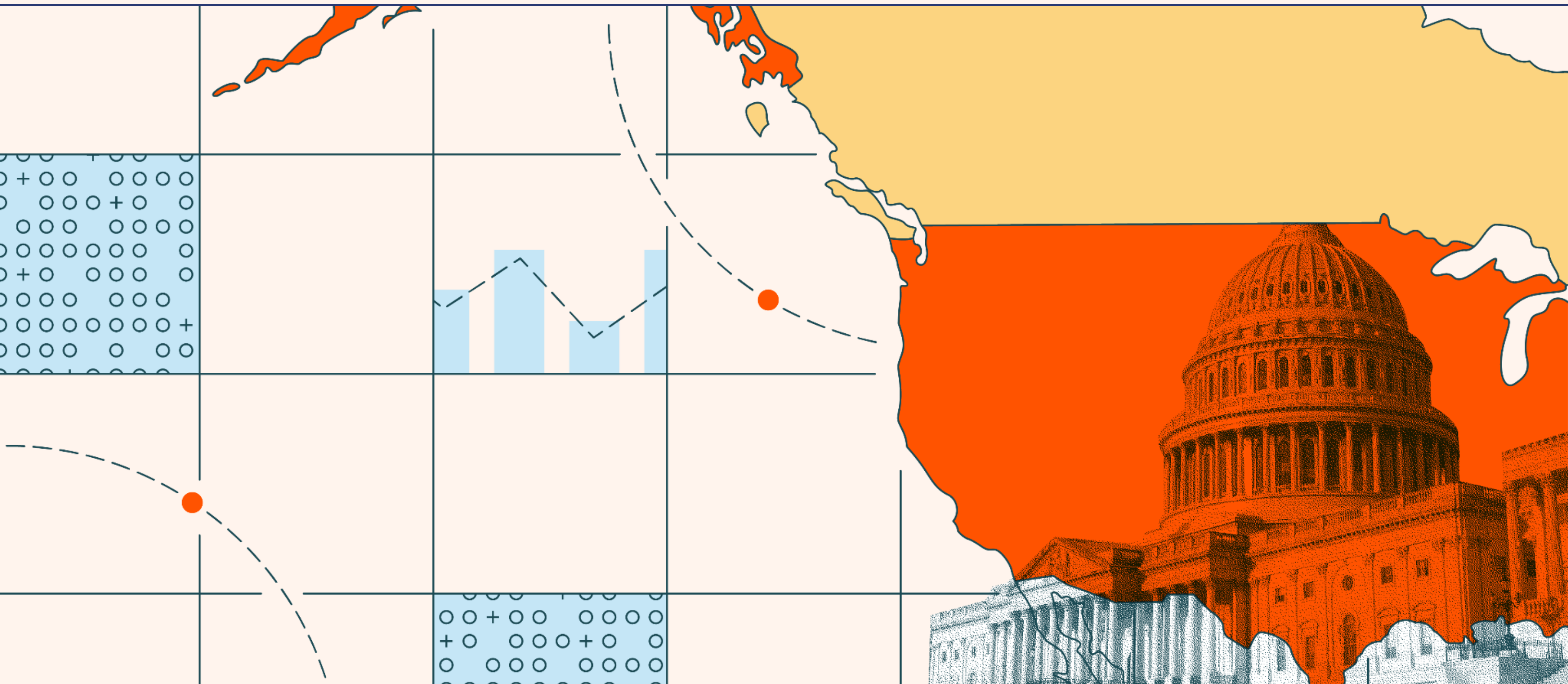
World Bank income classification	GNI per capita range	Example countries
High income (HI)	> $13,205	USA, UK, Saudi Arabia
Upper middle income (UMI)	$4,256 - $13,205	Argentina, China, Russia
Lower middle income (LMI)	$1,086 - $4,255	India, Nigeria, Ukraine
Low income (LI)	< $1,085	Ethiopia, Sudan, Yemen

Many of the top countries on our Global Crypto Adoption Index are in the LMI category, and taken together, LMI countries have seen the greatest recovery in grassroots crypto adoption over the last year. In fact, LMI is the only category of countries whose total grassroots adoption remains above where it was in Q3 2020, just prior to the most recent bull market.



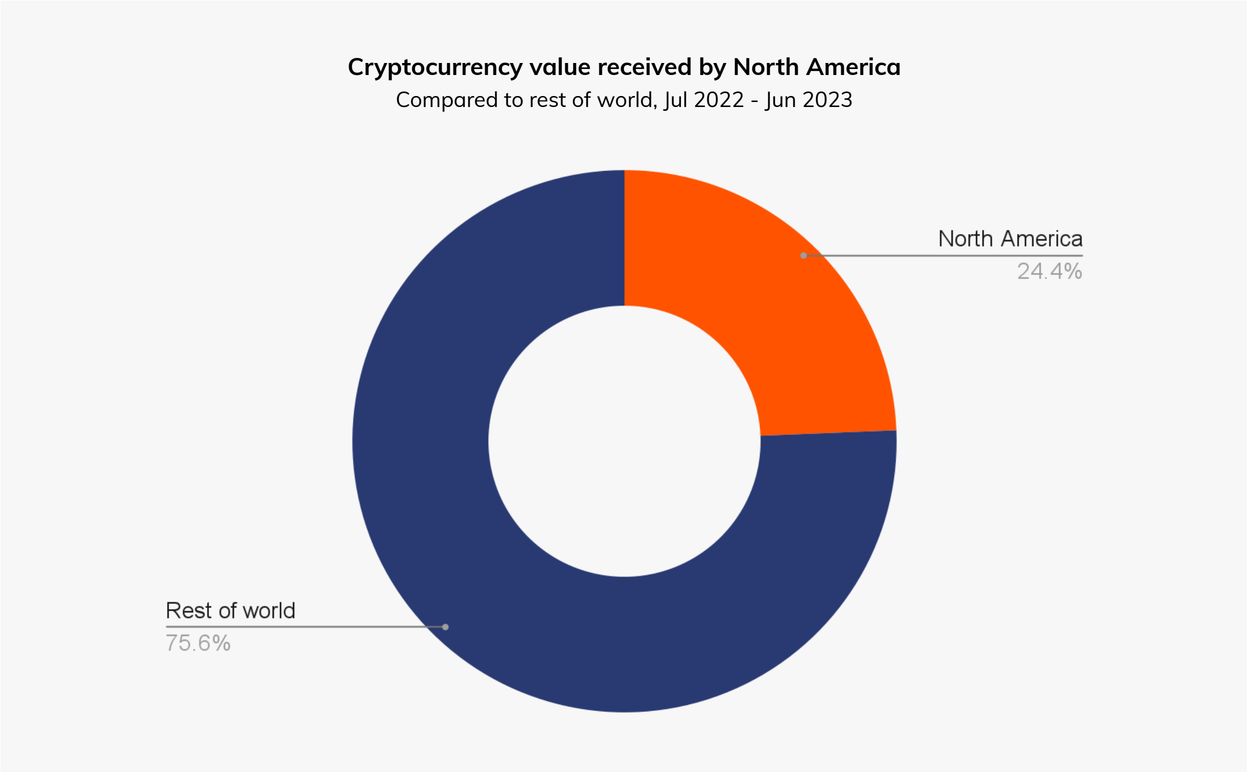
This could be extremely promising for crypto's future prospects. LMI countries are often countries on the rise, with dynamic, growing industries and populations. Many of them have undergone significant economic development in the last few decades to rise from the low income group. And perhaps most importantly of all, 40% of the world's population live in LMI countries — more than any other income category. If LMI countries are the future, then the data indicates that crypto is going to be a big part of that future. That, combined with the fact that institutional adoption — primarily driven by organizations in high-income countries — continues to gain steam even during the ongoing crypto winter, paints a promising picture of the future. We could see a combination of bottom up and top down cryptocurrency adoption in the near future if these trends hold, as digital assets fulfill the unique needs of participants in both segments.

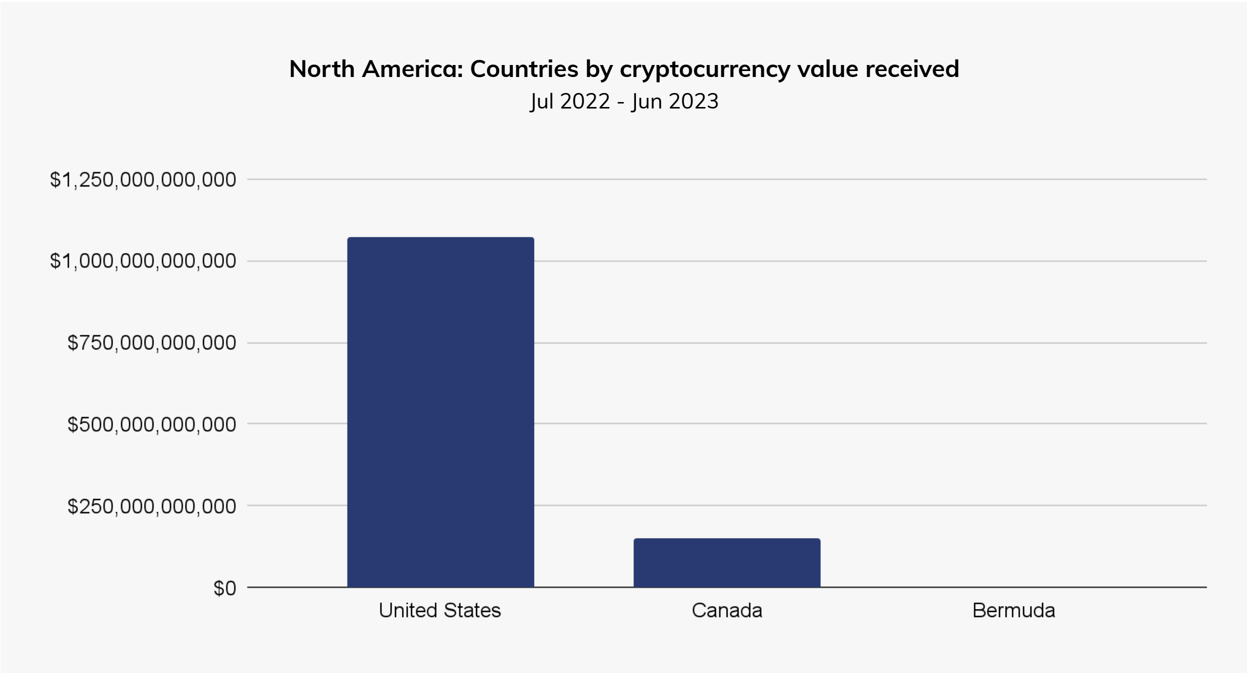
North America

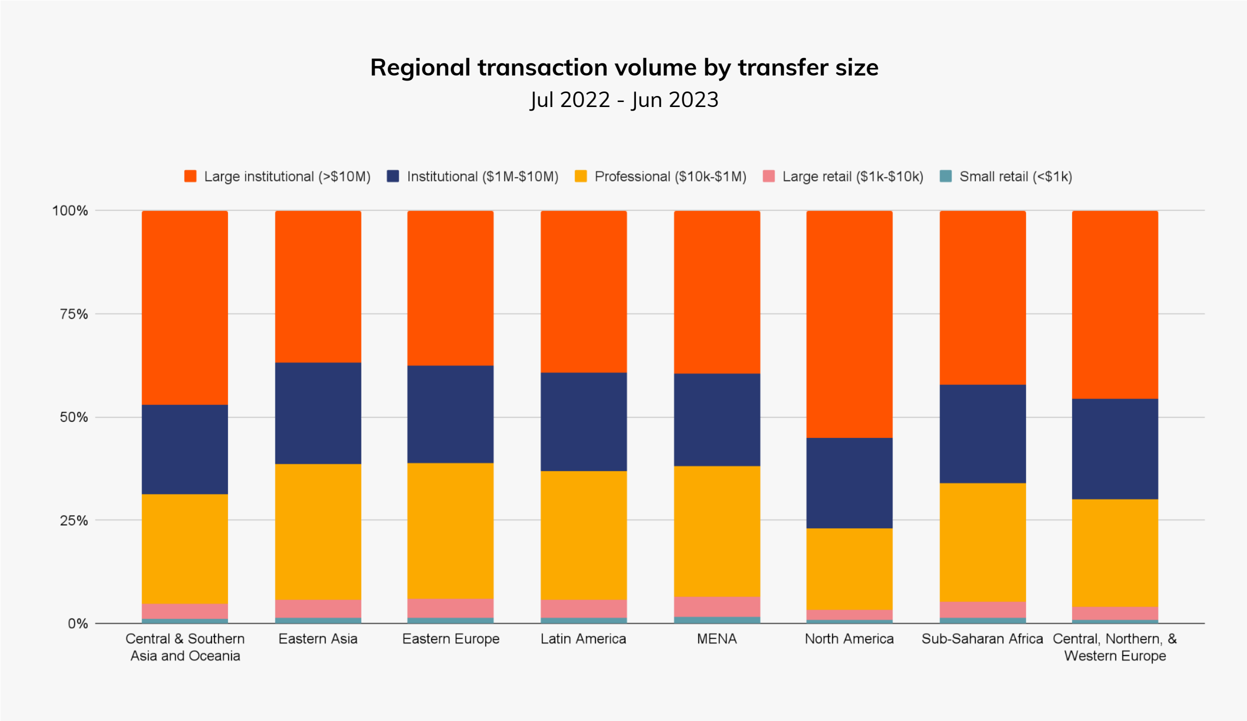


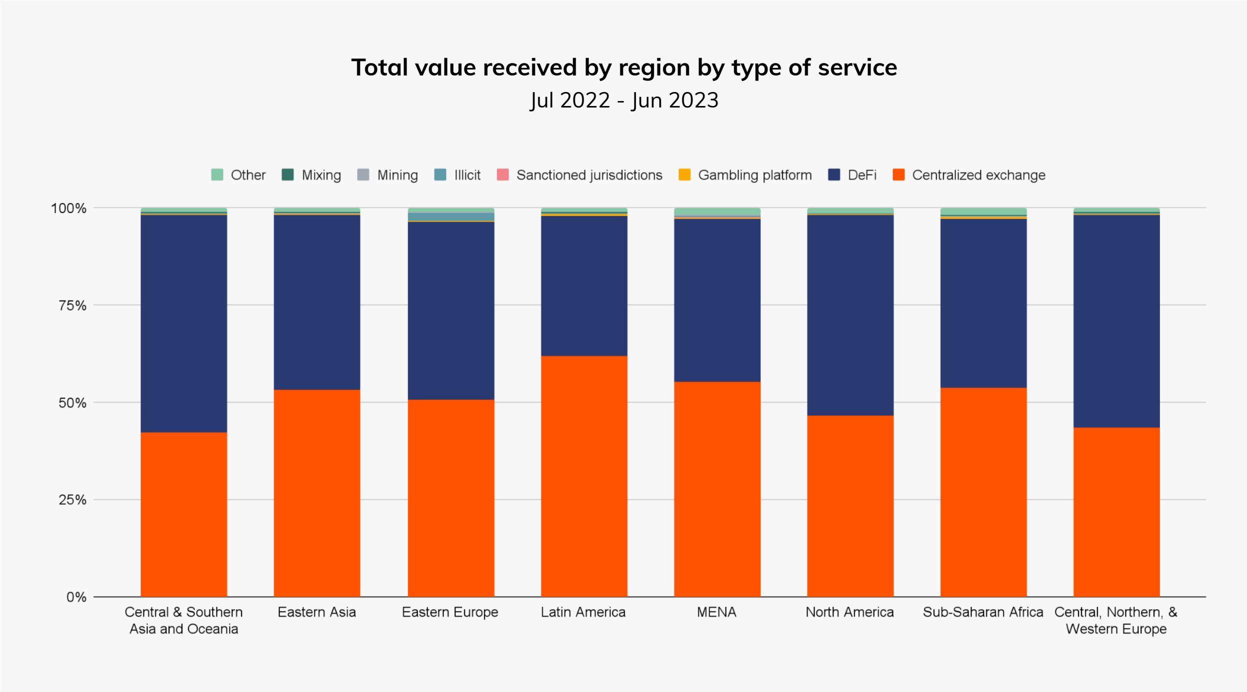
CRYPTOCURRENCY ACTIVITY SUMMARY

North America



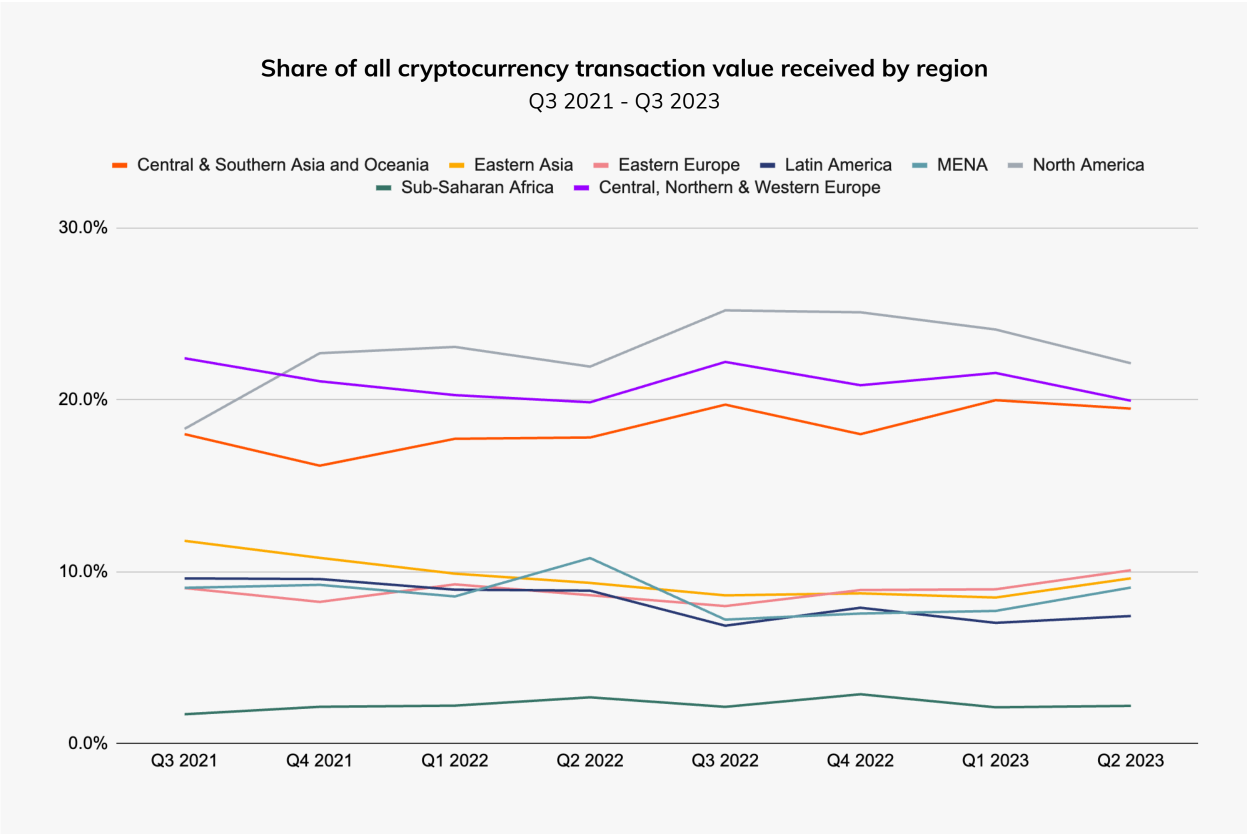



Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

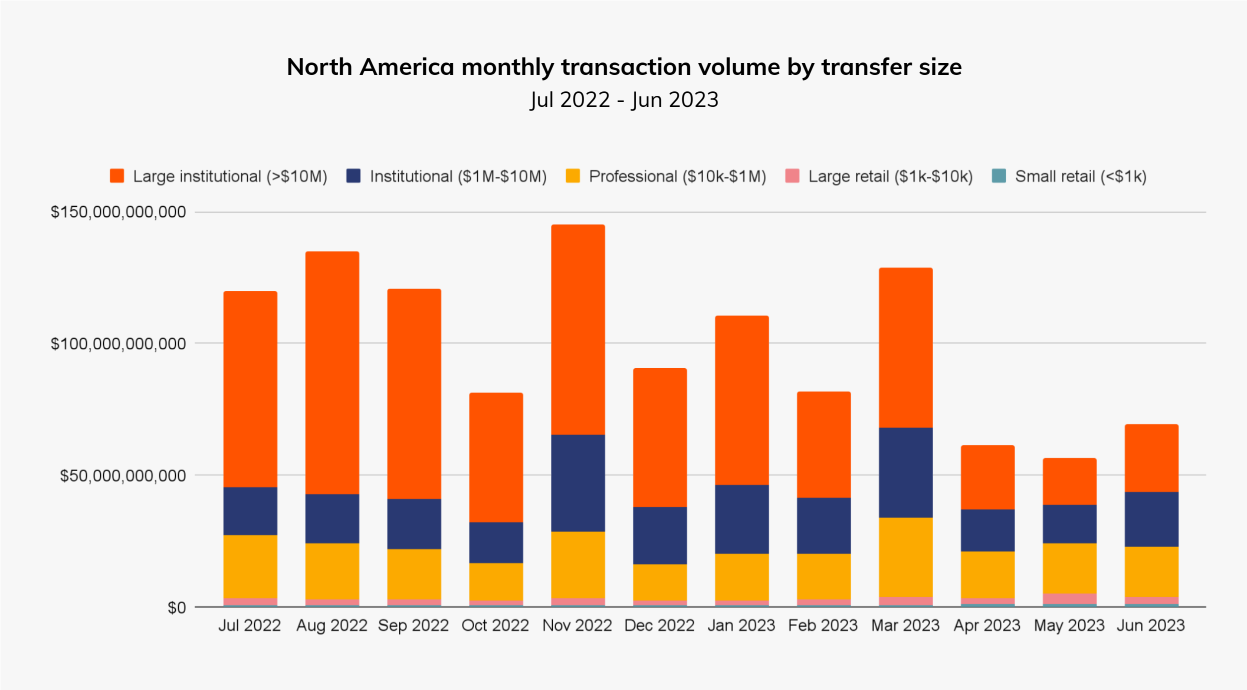

Total value received by region by type of service
Jul 2022 - Jun 2023
Other
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

North America Leads World in Crypto Usage Despite Ongoing Regulatory Questions, While Stablecoin Activity Shifts Away from U.S. Services

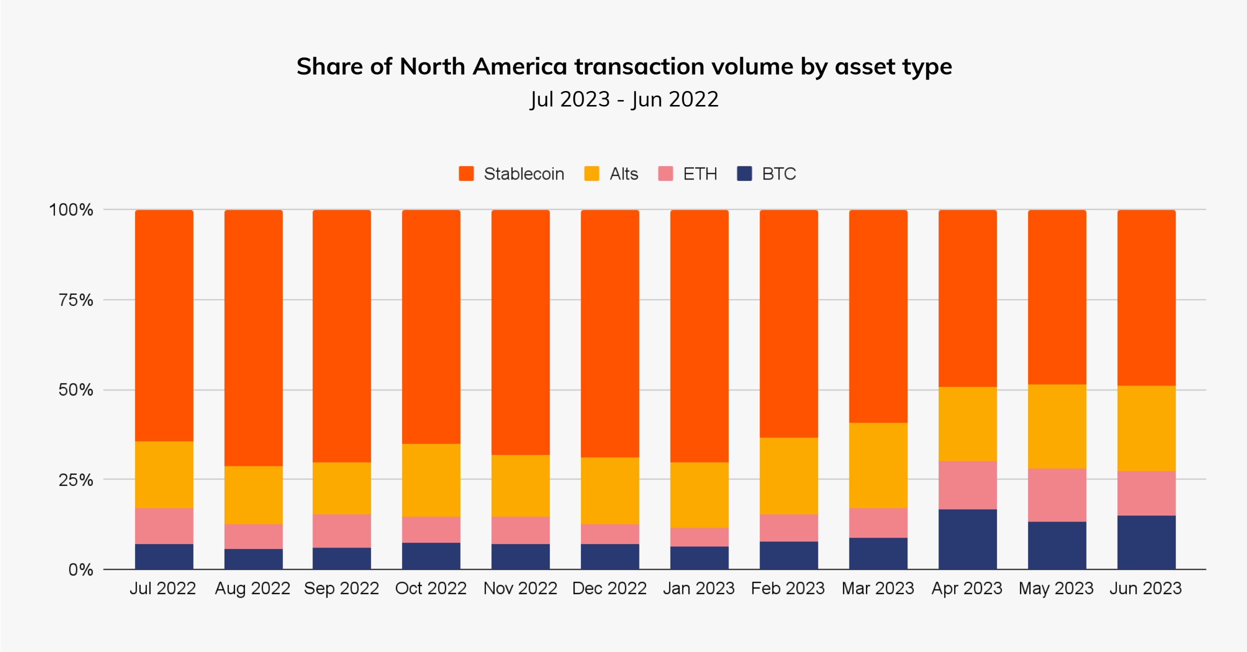
North America is the largest cryptocurrency market we study, with an estimated $1.2 trillion in value received on-chain between July 2022 and June 2023. That total represents 24.4% of global transaction activity during the time period studied.



As we've seen in other regions, on-chain data suggests that North American crypto activity has fallen over the last year, following negative developments such as the blowup of FTX in November of 2022. Interestingly, crypto activity contracted more in the months immediately following the March banking crisis that saw Silicon Valley Bank and crypto-friendly banks Signature and Silvergate close down, and the ensuing temporary drop in USDC's value on secondary markets. However, on-chain activity starts to tick back up beginning in June. As we see on the chart below, transaction size data suggests that pullback from institutional investors was the primary driver of the overall decline in activity, as retail users and sub-institutional pro traders' estimated activity remained consistent.



In line with a general trend seen around the world, we've also observed a relative decline in North America's stablecoin usage, compared to other digital assets, beginning around February 2023. Between then and June 2023, stablecoins fell from 70.3% to 48.8% of North America's on-chain transaction volume.

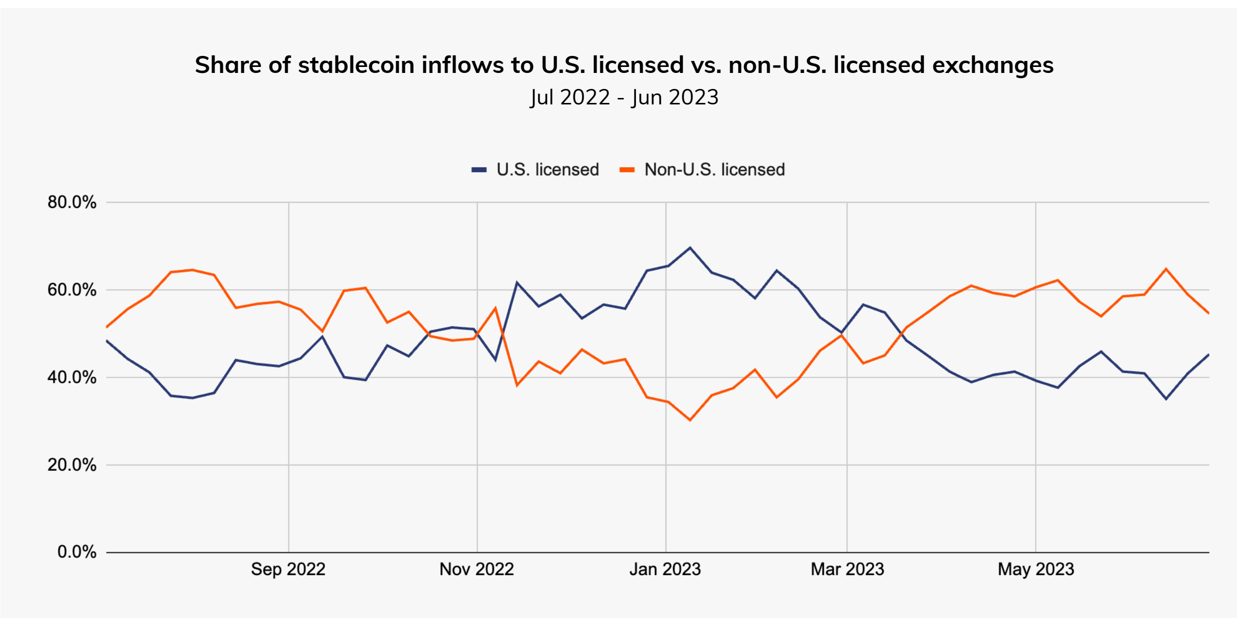


While the shift away from stablecoins was already underway before the banking failures in March, it's possible that investor concerns over stablecoins following that incident have played a role in its continuation. Relatedly, stablecoin market capitalization sank to its lowest point in over two years this past summer.

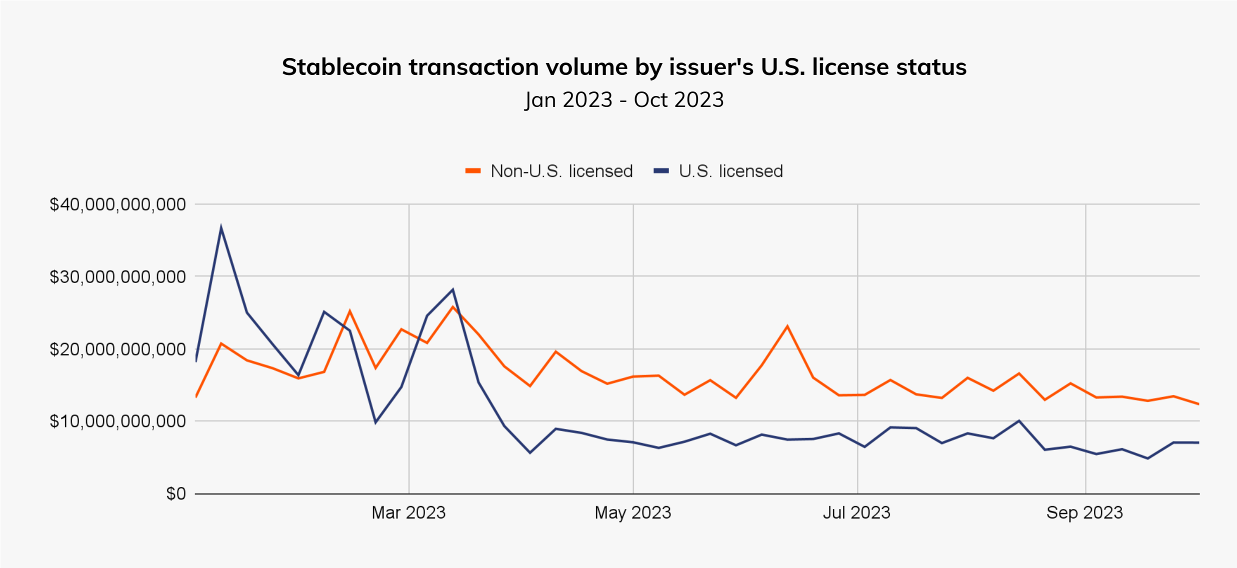
U.S. may be losing regulatory oversight of stablecoin market

Despite the declines described above, stablecoins are the most widely-used type of crypto asset — Chainalysis data shows that more than half of all on-chain transaction volume to or from centralized services between June 2023 and July 2022 took place in stablecoins — and more than 90% of stablecoin activity takes place in stablecoins pegged to the U.S. dollar. U.S. regulators have a strong interest in exercising some regulatory authority over stablecoins, given the central role of USD-denominated reserves for these assets. For one, crypto assets have been used for crime, including uniquely pernicious forms of crime that impact national security, such as theft by North Korea-linked hackers that ultimately funds North Korea's nuclear program. If U.S. regulators can work to limit stablecoins' role in such activity, that would have huge, positive impacts on cryptocurrency-related crime given the huge share of overall crypto activity stablecoins represent. Stablecoin regulation also gives regulators a chance to help ensure that the U.S. is home to the cryptocurrency businesses that will play a big role in expanding how the U.S. dollar is used globally as the digital economy continues to grow. However, data suggests that more and more stablecoin activity is occurring through entities that aren't licensed in the United States.

One way we see this is in looking at the services to which stablecoins are transferred. Since spring of 2023, the majority of stablecoin inflows to the 50 biggest crypto services have shifted from U.S. licensed services to non-U.S. licensed services, undoing a shift in the opposite direction that occurred over the course of late 2022 and early 2023. As of June, a 54.6% share of stablecoin inflows to top 50 services were going to non-U.S. licensed exchanges.



We can see similar trends in looking at stablecoin on-chain transaction volume by whether or not the stablecoin issuer is a U.S. licensed entity.



Though U.S. entities originally helped legitimize and seed the stablecoin market, more crypto users are pursuing stablecoin-related activity with trading platforms and issuers headquartered abroad. Unfortunately, this means the U.S. government is increasingly losing its ability to conduct stablecoin oversight and U.S. consumers are missing opportunities to engage with stablecoins with the safeguards provided by the U.S. regulatory regime.

While Congress has shown interest in stablecoin legislation recently, it has yet to pass comprehensive regulation. Here's a rundown of the proposed stablecoin bills to date:

1. Clarity for Payment Stablecoins Act, introduced in July 2023, seeks to provide a clear regulatory framework for the issuance of payment stablecoins as well as protect consumers and foster innovation.
2. Responsible Financial Innovation Act, introduced in June 2022 and reintroduced in July 2023. While not exclusively dedicated to stablecoins, a portion of the proposal would subject stablecoin issuers to new prudential financial regulations

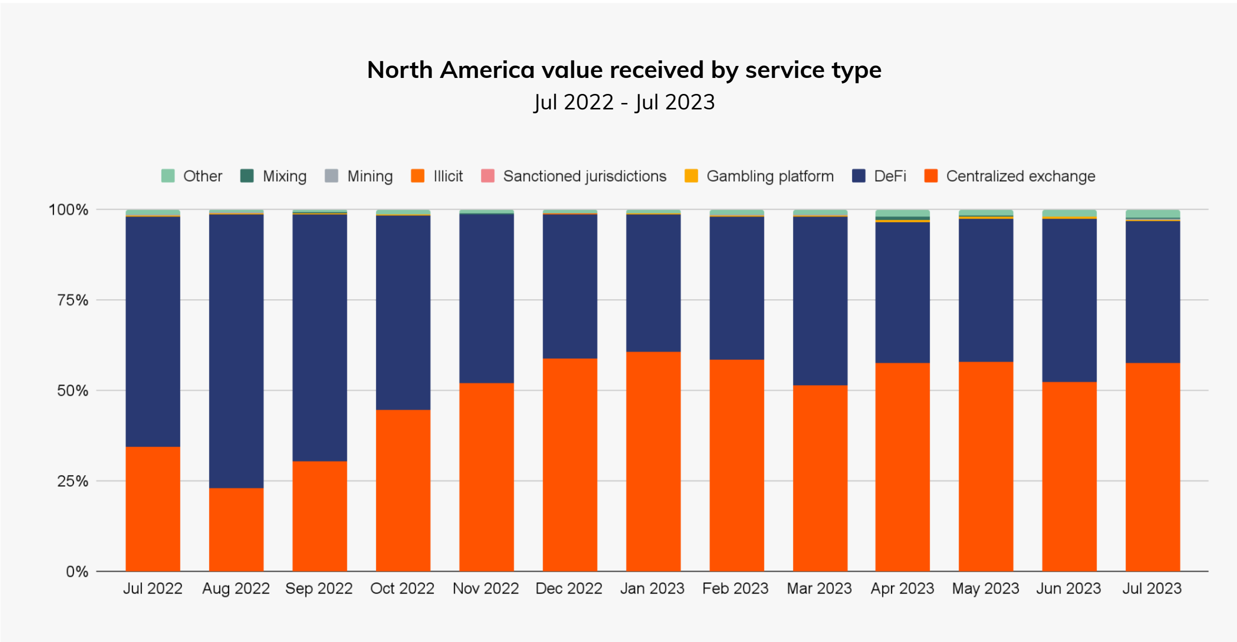
Regardless of which bill rises to the fore, the challenge for policymakers in passing stablecoin legislation will be to strike the right balance between keeping consumers safe and creating a framework that allows crypto markets to continue growing and encourages innovation. Time is also of the essence.

Jason Somensatto, Head of North America Public Policy at Chainalysis, agrees. "There continue to be important debates around the regulation of stablecoins, such as the appropriate role of state regulators in registering and supervising stablecoin issuers. These debates are resolvable and should be solved soon in the interest of global competition and necessary regulation," he told us.

Somensatto also discussed a clear advantage that stablecoins — and all cryptocurrencies — provide when compared with fiat currency. "The inherent transparency of blockchain technology empowers global regulators, including those in the U.S., to investigate and combat illicit activities efficiently," he said. "This transparency can also enhance the enforcement of sanctions, allowing participants throughout the crypto ecosystem to screen for and detect activities involving sanctioned entities."

DeFi usage declines overall

North America has historically been a heavy adopter of DeFi. However, while the region still leads the world in DeFi usage by raw transaction volume, the share of North American crypto activity attributed to DeFi has fallen significantly over the course of the last year.



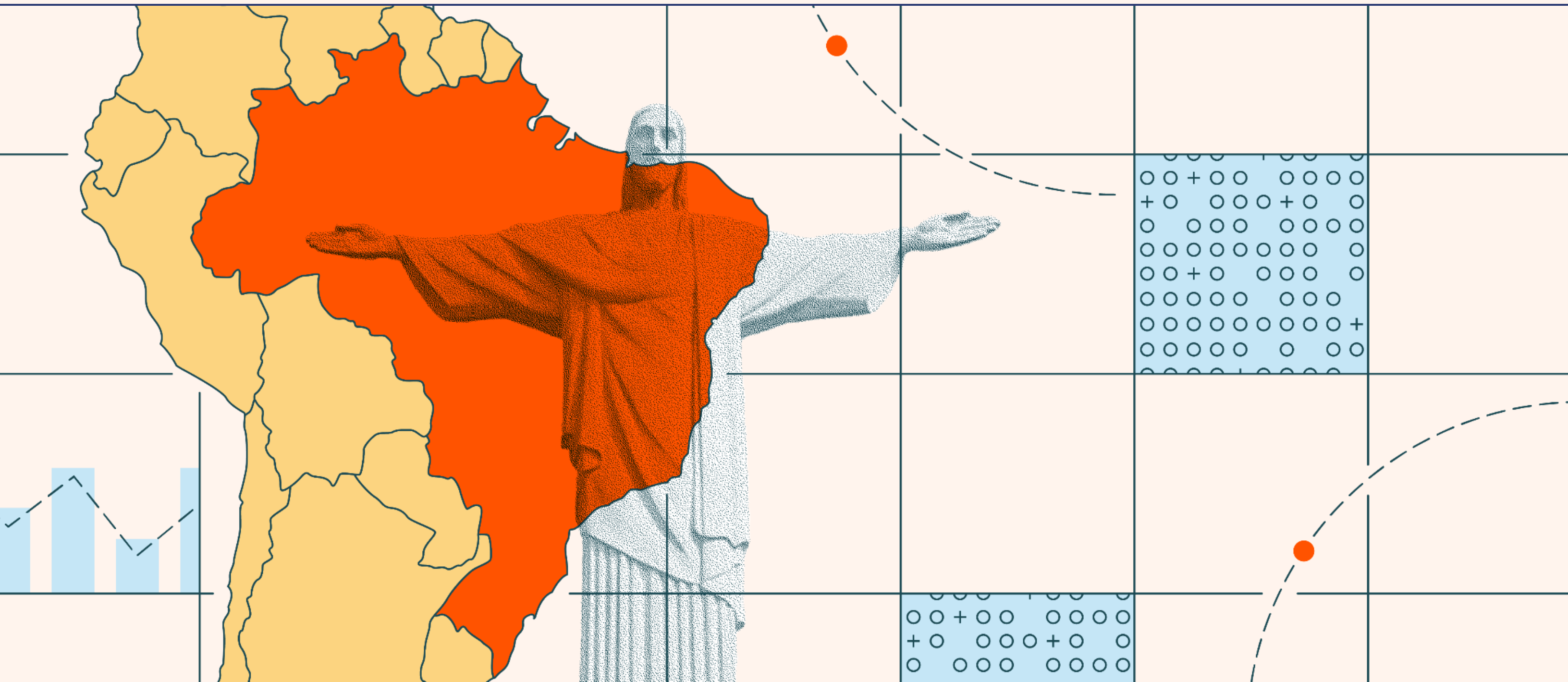
The most likely explanation is the market turmoil over the last year. As CoinDesk reported in a recent piece, many DeFi protocols cater to the trading of highly-speculative, recently created assets not available on centralized exchanges — those are typically the first assets investors will pull out of when markets decline. Another potential driver of DeFi's North American slump is the regulatory uncertainty it faces in the U.S. market.

Though challenging, developing such regulation is imperative as DeFi has many useful real-world applications like trading, asset management, lending, and payments, to name just a few. Coinbase CEO Brian Armstrong recently shared some DeFi use cases he's excited about. In addition to the benefits seen with borrowing, lending, payments, and staking, Armstrong is optimistic about web3 innovations like decentralized identity frameworks, which allow users (rather than big tech companies) to own their digital identifiers.

Regulation will be key to crypto's continued growth in the region

It's not surprising that crypto activity fell in North America in the last year as both transaction volume and grassroots adoption are down worldwide. Yet, in spite of transaction volume declining, North America still ranked fourth in the 2023 Global Crypto Adoption Index. As the region rebounds from crypto winter, regulation will play an important role in its recovery. The U.S. Congress is working to advance two promising pieces of crypto legislation, and prominent regulators are committed to growing the ecosystem safely. CFTC Commissioner Caroline Pham recently shared that her organization could pilot a program to "support the development of compliant digital asset markets and tokenization." Proactive approaches like these show promise for the growth of crypto in North America and the world at large.

Latin America

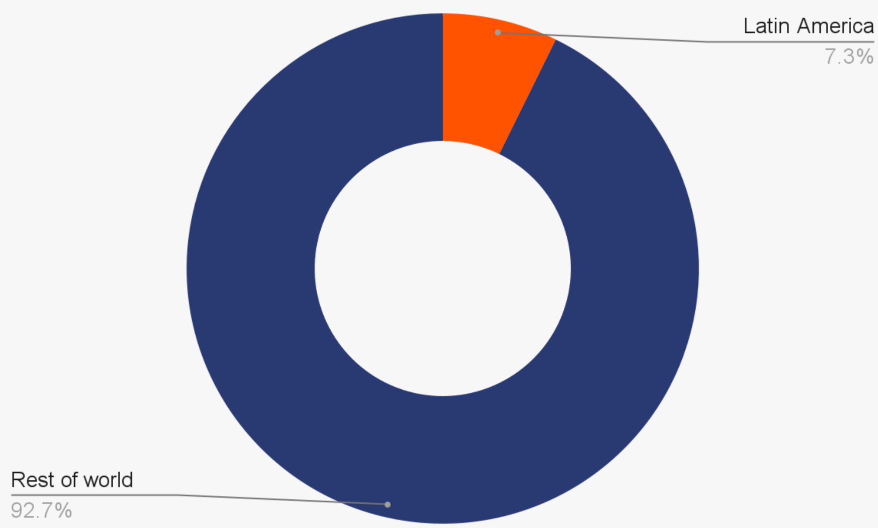


CRYPTOCURRENCY ACTIVITY SUMMARY

Latin America

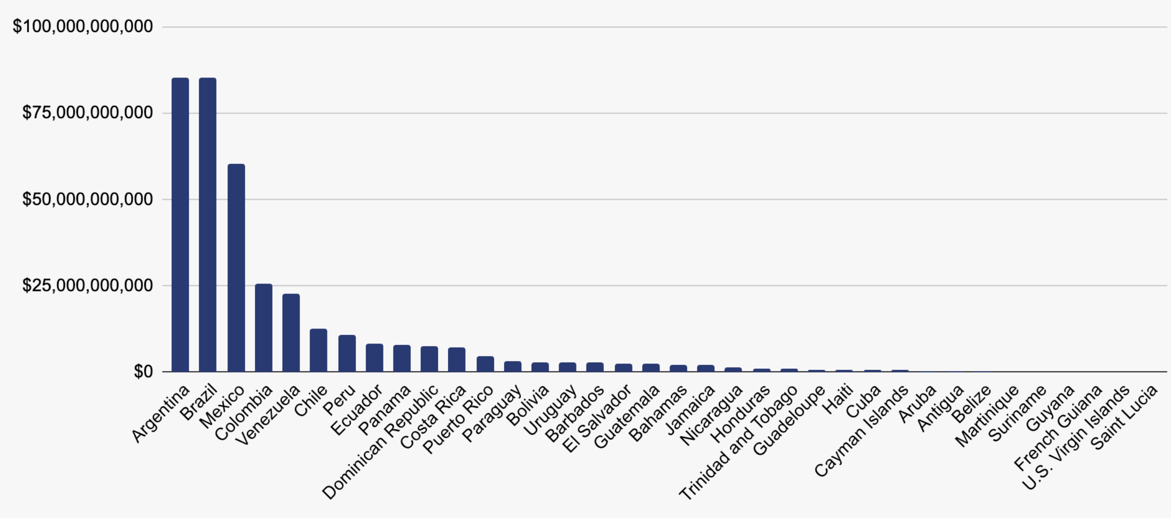
Cryptocurrency value received by Latin America

Compared to rest of world, Jul 2022 - Jun 2023



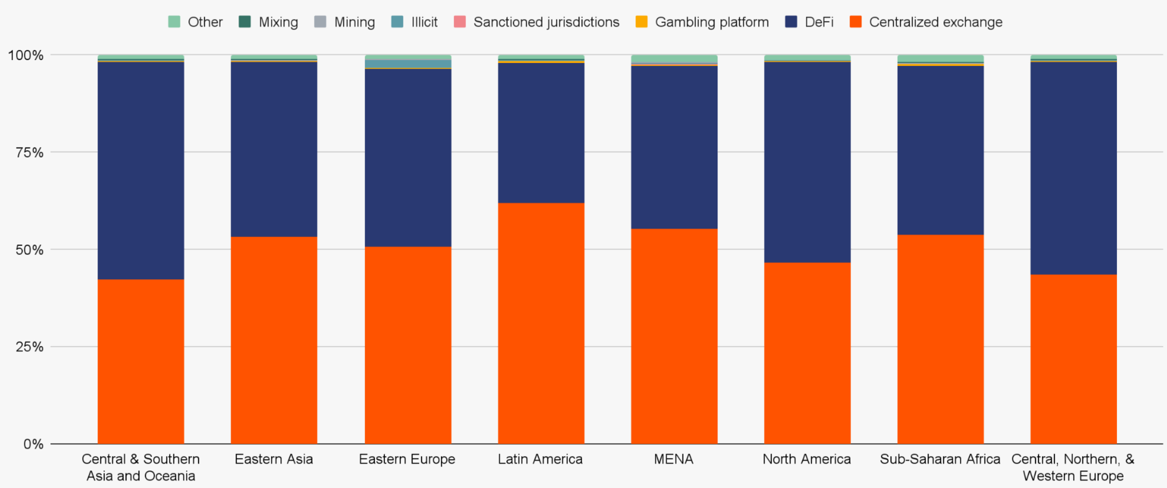
Latin America: Countries by cryptocurrency value received

Jun 2022 - Jul 2023



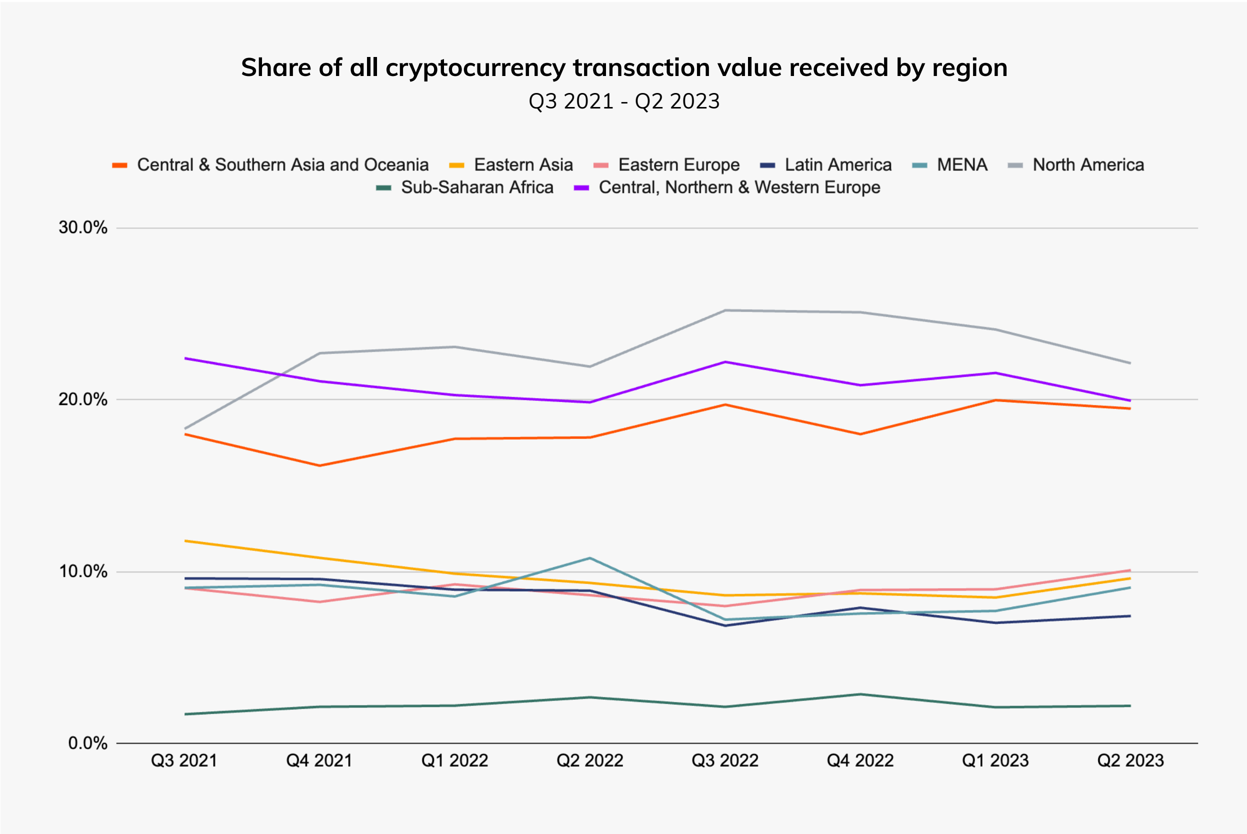
Regional transaction volume by transfer size
Jul 2022 - Jun 2023

Total value received by region by type of service
Jul 2022 - Jun 2023



Venezuela and Argentina Stand Out as Examples of Crypto's Unique Utility

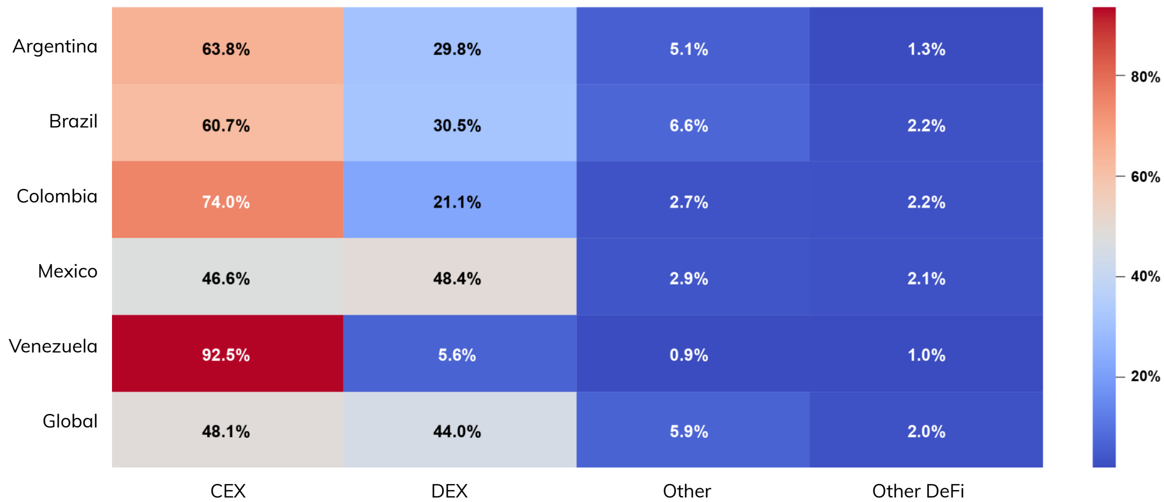
Latin America has the seventh-largest crypto economy of all regions we study, ahead of only Sub-Saharan Africa, but not far behind MENA, Eastern Asia, and Eastern Europe. Its position compared to other regions has held relatively steady over the last two years.



However, grassroots adoption in the region is strong, with three countries ranking in the top 20 of our Global Crypto Adoption Index: Brazil (ninth overall), Argentina (15), and Mexico (16). Cryptocurrency has become an important part of day-to-day life in many countries throughout the region, and in particular those facing currency devaluation. We'll explore that dynamic in more detail later.

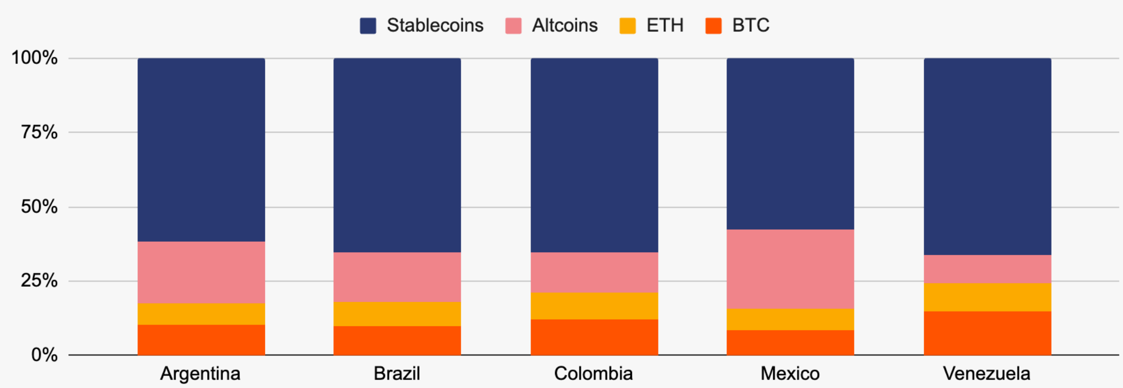
There's significant variation in crypto usage patterns among countries in Latin America. Check out the heat map below, which compares a few of the region's biggest crypto-using countries by preferred platform type.

Share of Latin America country crypto activity by platform type vs. Global average
Jul 2022 - Jun 2023



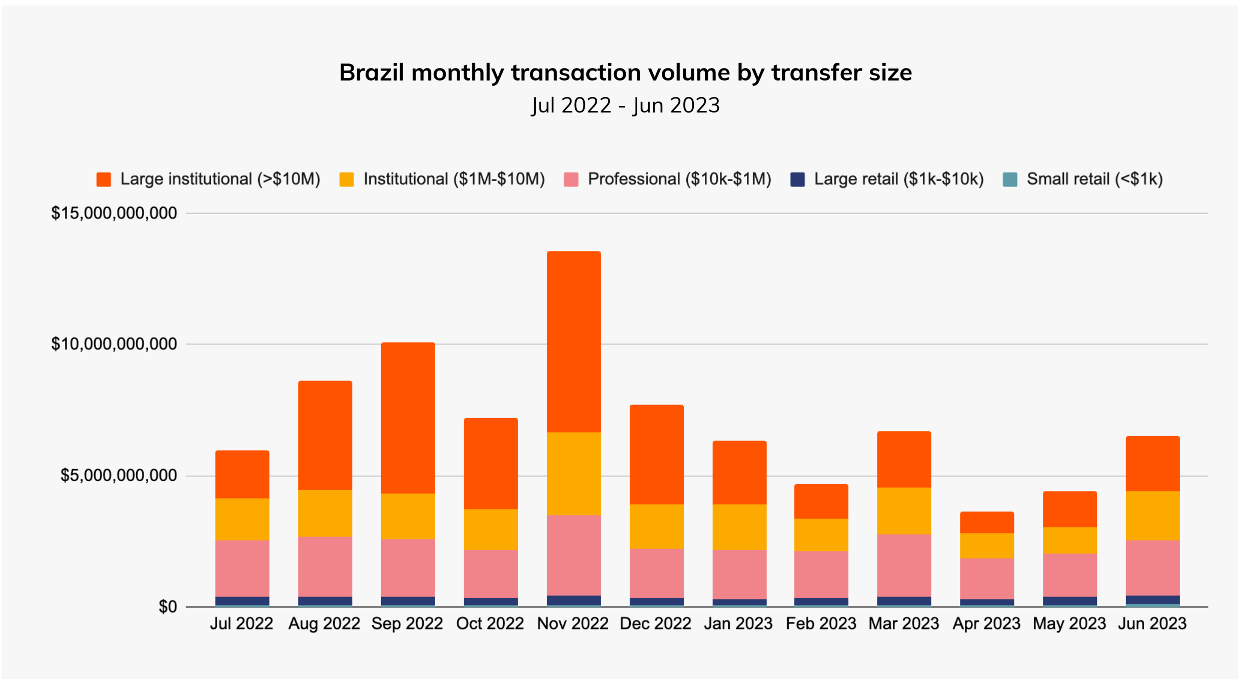
Nearly every country shown devotes a greater share of transaction volume to centralized exchanges than the global average. In Venezuela, a whopping 92.5% of crypto activity goes through these services. Mexico, however, is the lone exception — its platform breakdown is more in line with global averages, with nearly half of all volume being processed through DEXes. This is likely the reason why Mexico devotes a higher share of purchasing activity to altcoins, as DEXes list a far greater number of assets than their centralized counterparts.

Total cryptocurrency value received by country by asset type
Jul 2022 - Jun 2023



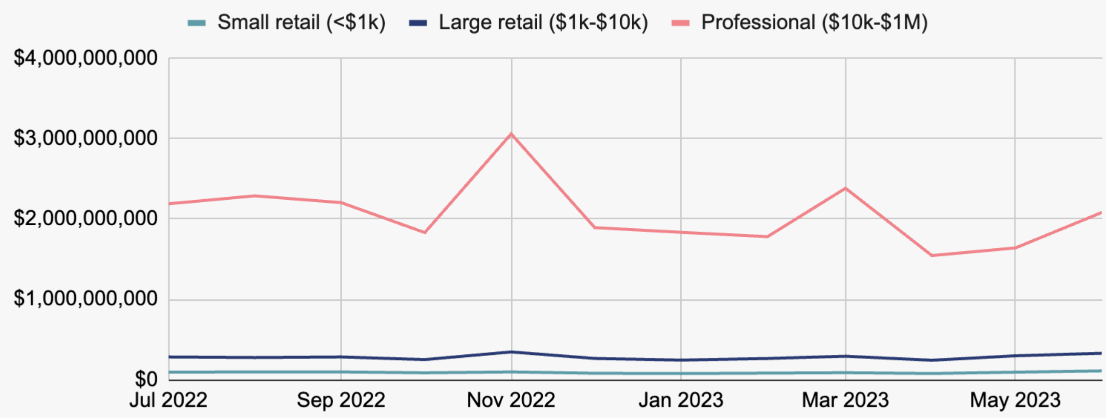
Mexico is also an important country to watch for its embrace of cryptocurrency-based remittances. Remittances represent an important area of finance that crypto advocates have long touted as one the technology can make faster and cheaper. Mexico is the world's second-biggest receiver of remittances, with an estimated $61 billion flowing into the country from overseas per year, mostly from the United States. Daniel Vogel, CEO of Mexican exchange Bitso, says his company processed over $3.3 billion in crypto remittances sent from the U.S to Mexico in 2022, which would represent 5.4% of the total market. Industry participants will likely be interested to see if that share rises in the coming years, both for Mexico and other Latin American countries with large remittance markets.

Brazil is another unique market within Latin America. In previous editions of our Geography of Cryptocurrency Report, we've written about Brazil's well-developed institutional crypto market, and the country's embrace of DeFi and other innovative crypto platform types, putting it more in line with wealthier regions that were earlier to adopt crypto, such as North America and Western Europe, more so than its regional neighbors. Brazil's market still has those characteristics, but less so than in previous years. As we see below for instance, large institutional-sized transfers have declined, driving an overall downward trend in crypto activity and accounting for a smaller overall share of the remaining activity.



However, there are still some positive takeaways for Brazil's crypto enthusiasts. For one, while large institutional transactions generally trended down, they appear to be picking back up, with three straight months of growth through June. In addition, even in the months where the decline in large institutional transfers drove overall declines in crypto activity, professional and retail-sized transaction volume stayed relatively even. This is more obvious as expressed on the line chart on the following page.

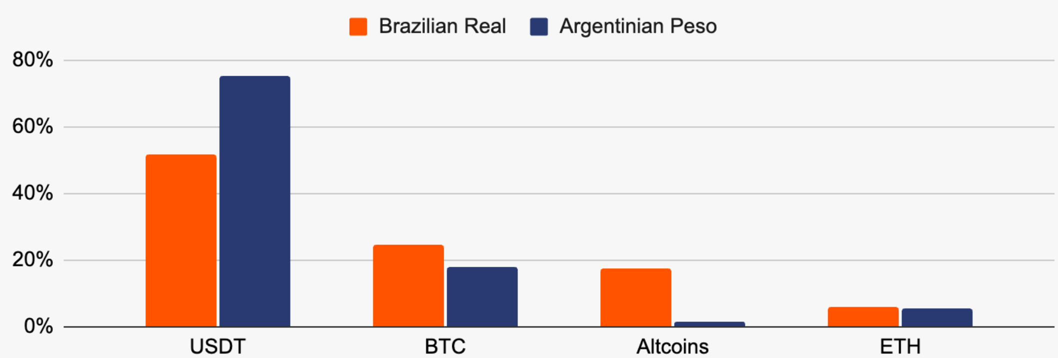
Brazil retail and professional-driven transaction volume
Jul 2022 - Jun 2023



The data paints an optimistic picture for the Brazilian crypto market. Even in crypto winter, the so-called "middle class" of high-value crypto traders, along with basic retail users, stuck with the asset class. If they continue to trade, it's not unreasonable to think Brazil's institutional users will return and perhaps even surpass their previous activity levels if and when we enter another positive market cycle.

Even with the institutional hiccups, Brazil's market is still quite different from its less economically secure neighbors. This particularly comes through when we move off-chain and look at exchange order book data. Below, we show the most-purchased assets across a number of exchanges popular in Latin America using the Brazilian Real, compared to the most-purchased assets using the Argentinian peso — Argentina has faced significant currency devaluation over the last year, while Brazil's currency has been stable.

Most-purchased cryptocurrencies by fiat currency on exchanges: Brazilian Real vs. Argentinian Peso
Oct 2022 - Oct 2023



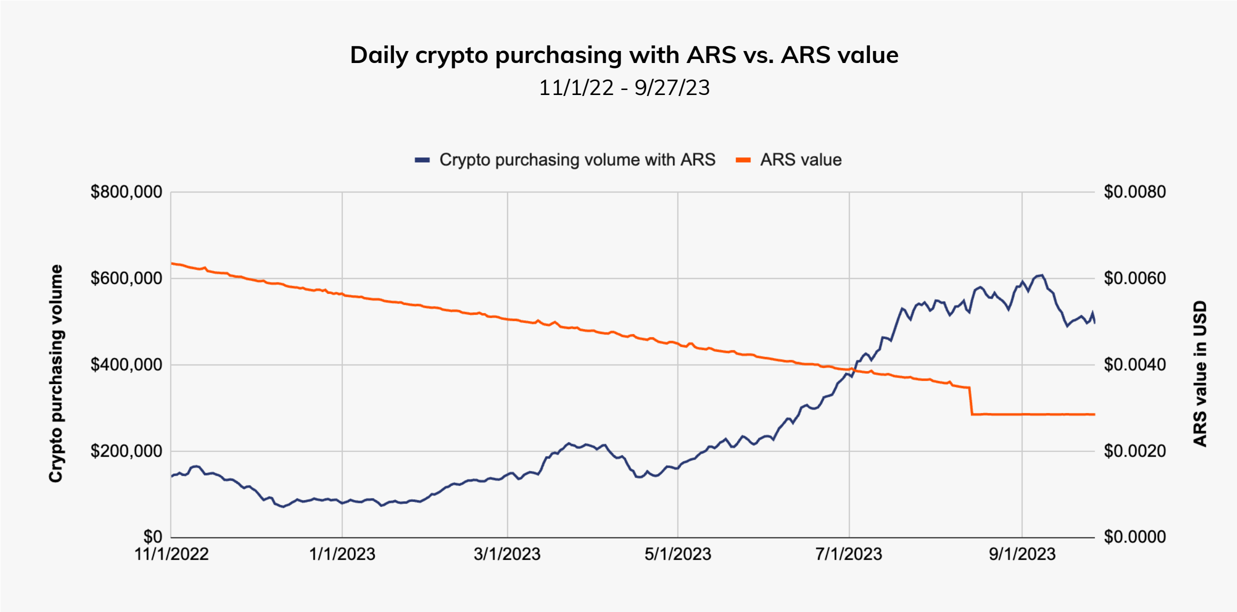
The data suggests that demand for the stablecoin USDT is much higher in Argentina than in Brazil — as we explore in detail below, this is almost certainly due to the currency devaluation Argentina has faced of late. Meanwhile, Brazilians display a higher demand for Bitcoin and especially altcoins, which are more typically used for long-term investment and speculation.

How crypto provides relief in Argentina's currency crisis

Argentina has faced economic woes for decades, with cycles of extreme currency devaluation periodically hurting residents' ability to save and making day-to-day financial activity difficult. Unfortunately, Argentina is in the midst of another such cycle, with the Argentinian peso having fallen approximately 51.6% in value in the year leading up to July 2023. During that same time period though, Argentina leads Latin America in raw crypto transaction volume with an estimated $85.4 billion in value received, and is second in the region for grassroots adoption. We spoke with Alfonso Martel Seward, Head of Compliance & AML at Argentina-based cryptocurrency exchange Lemon Cash to learn more about what drives Argentinian cryptocurrency adoption.

Martel Seward indicated that the escape cryptocurrency can provide ordinary residents from the devaluation of the Argentinian peso is the country's primary driver of adoption. "We have really high inflation, and there are lots of restrictions against buying foreign currencies. That makes crypto a valuable option for saving," he said. Martel Seward indicated that stablecoins in particular are popular for this use case, and provide a new way of meeting long standing local demand for the U.S. dollar. "You can walk up to any Argentinian person and ask how many pesos to a dollar, and they'll know," Martel Seward explained. "As crypto adoption has grown, lots of people here will now get their paycheck and immediately put it into USDT or USDC."

We can see evidence of crypto's role as a boon against currency devaluation in Argentina on the chart below, which uses order book data from a selection of exchanges popular in the region to compare the value of the Argentinian peso with the volume of crypto purchased using the Argentinian peso over time.



As the Argentinian peso steadily lost value, crypto purchasing trended up, then really spiked in mid-April, around the time Argentina's inflation crossed 100% for the first time in three decades. We also see a small dropoff in crypto purchasing starting in September, soon after the peso's value stabilized.

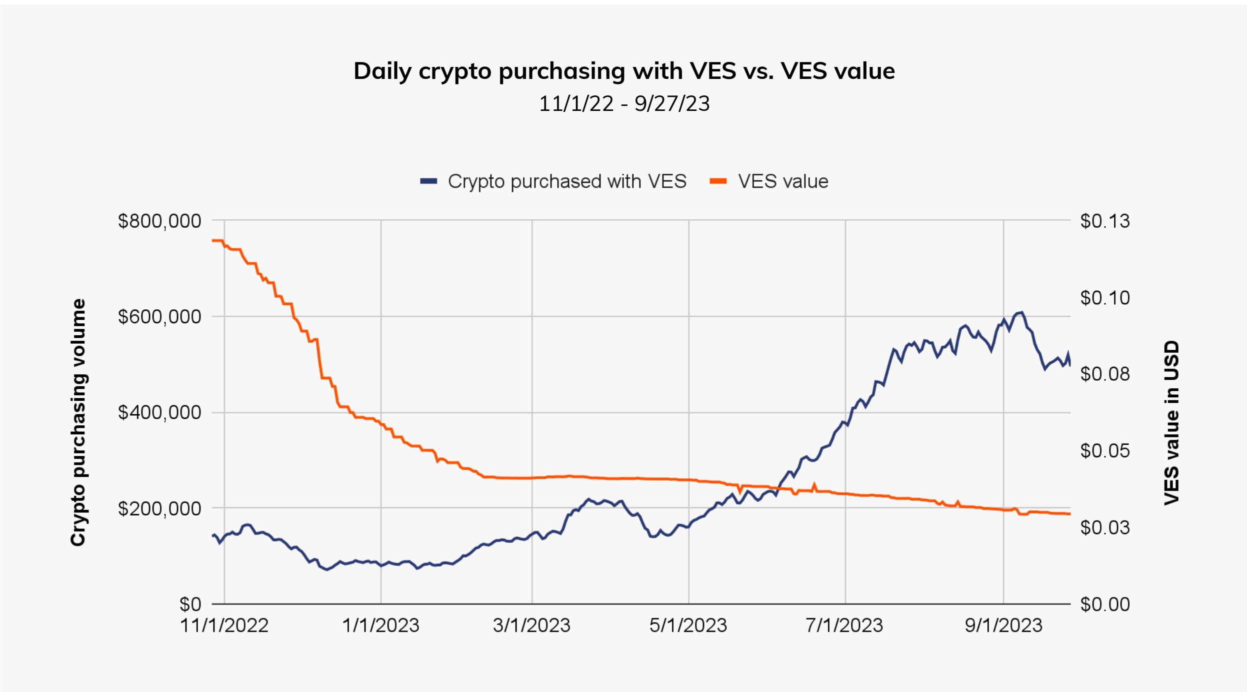
Argentina's economic conditions don't just make it difficult for citizens to save. They also make basic day-to-day commerce hard, as prices can change within a matter of hours. To that end, Lemon Cash offers users a debit card that allows them to draw on their crypto accounts to make purchases at any card-accepting retailer — upon swiping the card, crypto is instantly sold from the user's account, and the business receives payment in the local currency. These offerings have helped Lemon Cash become a leader in an extremely active cryptocurrency market. "Crypto is mainstream in Argentina — about 5 million people [out of a total population of 45.8 million] use it, and 2 million of them are on Lemon," said Seward. Lemon Cash's growth, and crypto's popularity in Argentina generally, are a testament to the asset class' unique ability to provide relief during periods of economic hardship.

Venezuela: Cryptocurrency as a weapon against authoritarianism

Like Argentina, Venezuela has seen more than its fair share of economic problems and suffered from severe currency devaluation. However, Venezuela differs from Argentina in one key way: The country is ruled by an authoritarian government. Under the Nicolás Maduro regime, Venezuelans face significant human rights abuses and political repression, and see less opportunity due to government corruption, examples of which include embezzlement from the country's state-owned oil company.
How can cryptocurrency improve the lives of people subject to both poor economic conditions and the mistreatment of an autocratic regime? We talked to Venezuelan opposition leader Leopoldo López to learn. López is the founder of Venezuelan political party Voluntad Popular, and became a political prisoner in 2014 after leading protests against the Maduro regime, eventually leaving the country in 2020. López is a close associate of Venezuela's former president-in-exile Juan Guaidó, and worked with Guaidó's interim

government that contested Maduro's presidency. Since leaving Venezuela, López has continued to push for democracy in Venezuela from abroad, and has embraced cryptocurrency as a tool for furthering that agenda.

López explained to us how cryptocurrency has helped many Venezuelans preserve their savings as its local currency, the bolivar, has lost value. "Venezuela has had one of the worst ever hyperinflation rates at over 1 million percent," López told us. "Cryptocurrency, particularly stablecoins, has helped many Venezuelans overcome this." We can see this dynamic in exchange order book data, where purchasing of cryptocurrency using bolivars tends to rise when the bolivar loses value. Though the relationship isn't as strong as what we see in Argentina or in previous years for Venezuela — there's a slight delay between the biggest drop in bolivar value and the big stablecoin purchasing spike that starts in April — it's important to note that other inflation-related metrics, such as consumer prices, did spike at this time.



López also told us about cryptocurrency's important role in enabling remittances to Venezuela, which have become increasingly important to the country in the last few years. "Until recently, Venezuela wasn't a country with large migration rates," he told us. "But since 2014, there's been a mass exodus due to the complex humanitarian emergency. Over the past ten years, about 25% of the population has left the country." That exodus has turned remittances into a huge part of Venezuela's economy, and López tells us that many have turned to stablecoins as an alternative way of fulfilling this need.

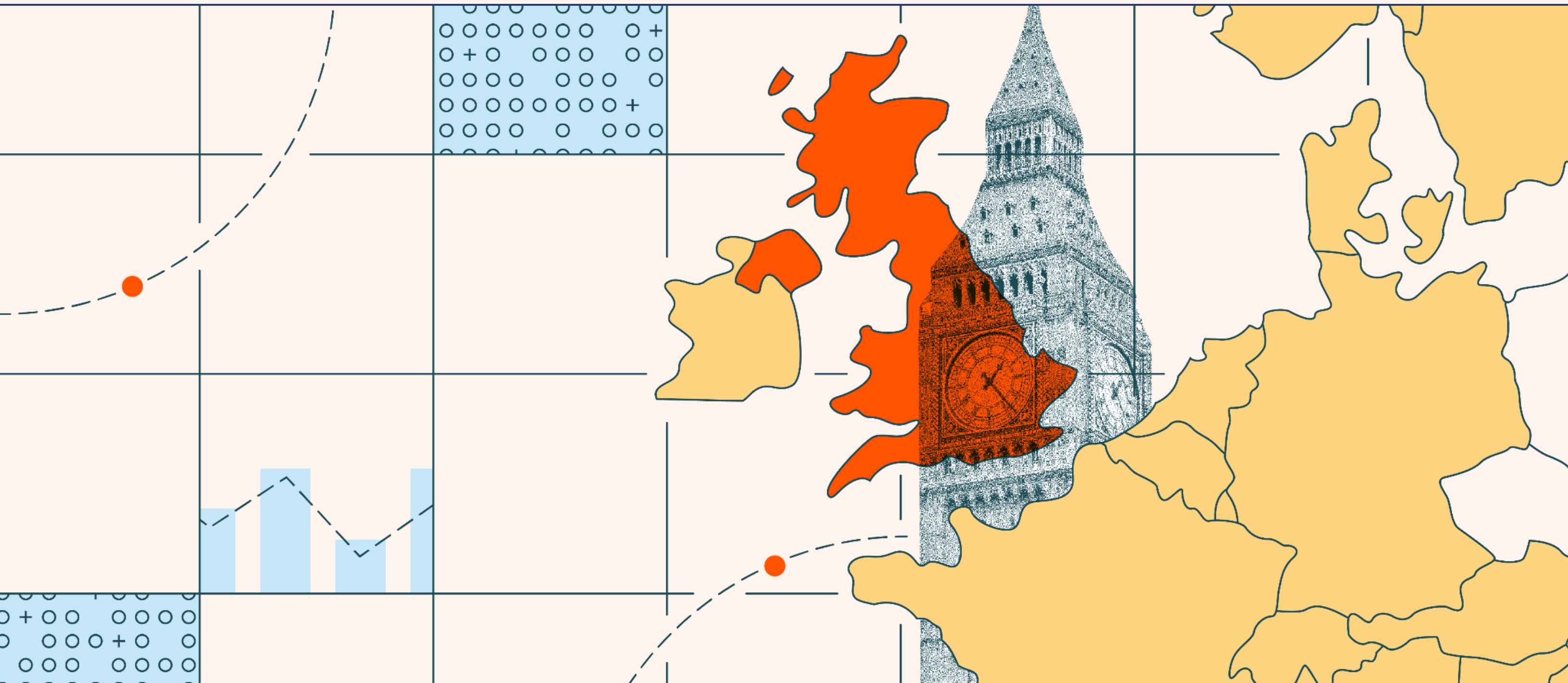
The crypto use case most unique to Venezuela, however, is in how it can enable citizens to resist the oppression of the Maduro regime. López told us about one example in particular. During the Covid crisis in 2020, the Guaidó-led interim government hatched a plan to use cryptocurrency to deliver direct aid to doctors and nurses in the country. Cryptocurrency was their best option, as international aid was difficult to deliver via normal means due to the Maduro regime's corruption and tendency to refuse much-needed financial help on political grounds. "The challenge was how to make a direct cash transfer without interference of the dictatorship — it has full control of the banks and financial system," he explained. The team got around this by using cryptocurrency wallets to transfer the funds to trusted individuals on the ground — "human ATMs," as López put it — who then distributed it to doctors and nurses. They also applied KYC checks to recipients based on the records of doctor and nurse unions trusted by the interim government, to ensure that funds went only to medical professionals and not to any sanctioned individuals.

"This program directly helped 65,000 doctors and nurses," López explained. "Indirectly, it helped hundreds of thousands of people who received care from them. Keep in mind, at this time, the average nurse's salary was $3 per month and the average doctor's $5 per month. This program gave both $100 per month. It's also important to note the emotional impact — for them to know they weren't alone on the frontlines during the Covid crisis was an important contribution of the program."

It doesn't stop there either. López told us that cryptocurrency has become an important tool for those resisting autocratic governments, not just in Venezuela, but around the world. "Crypto has provided an alternative to democracy activists, NGOs, and freedom fighters to overcome censorship and the closing of the civic space," he said. But he stressed that cryptocurrency on its own isn't a magic bullet. Off-ramping into fiat will always be difficult in authoritarian countries. "I believe that the true value of cryptocurrency to support democracy movements will be realized only when off-ramping has no dependency at all on the autocratic regime."

Venezuela's embrace of cryptocurrency, and its role in aid programs like those led by López and his allies, provide an important reminder of the potential this still-young technology has to foster freedom and improve quality of life in the places that most need both.

Central, Northern, & Western Europe

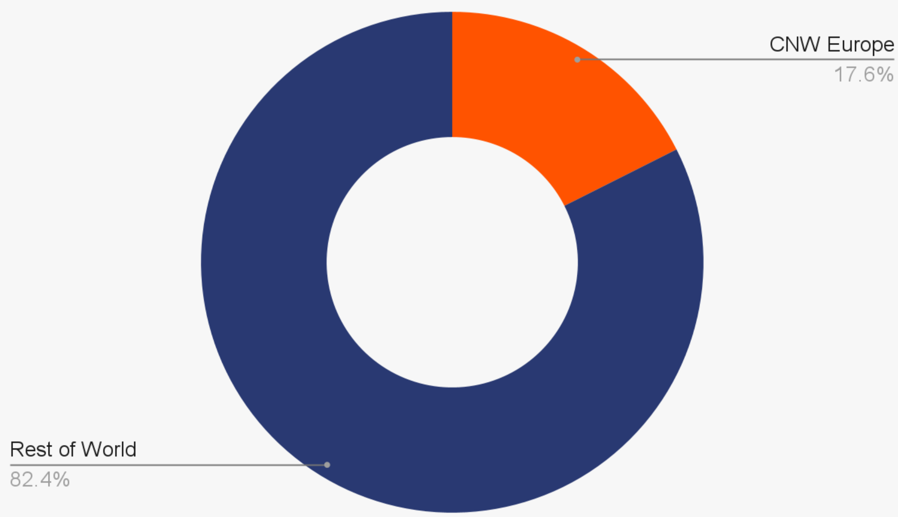


CRYPTOCURRENCY ACTIVITY SUMMARY

Central, Northern, & Western Europe

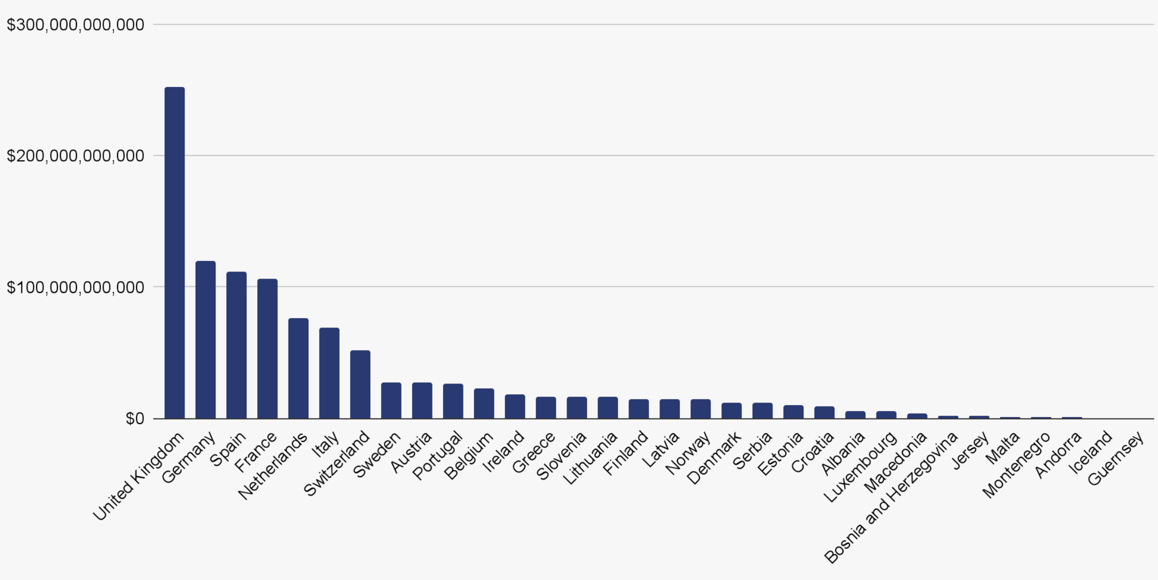
Cryptocurrency value received by Central, Northern, and Western Europe

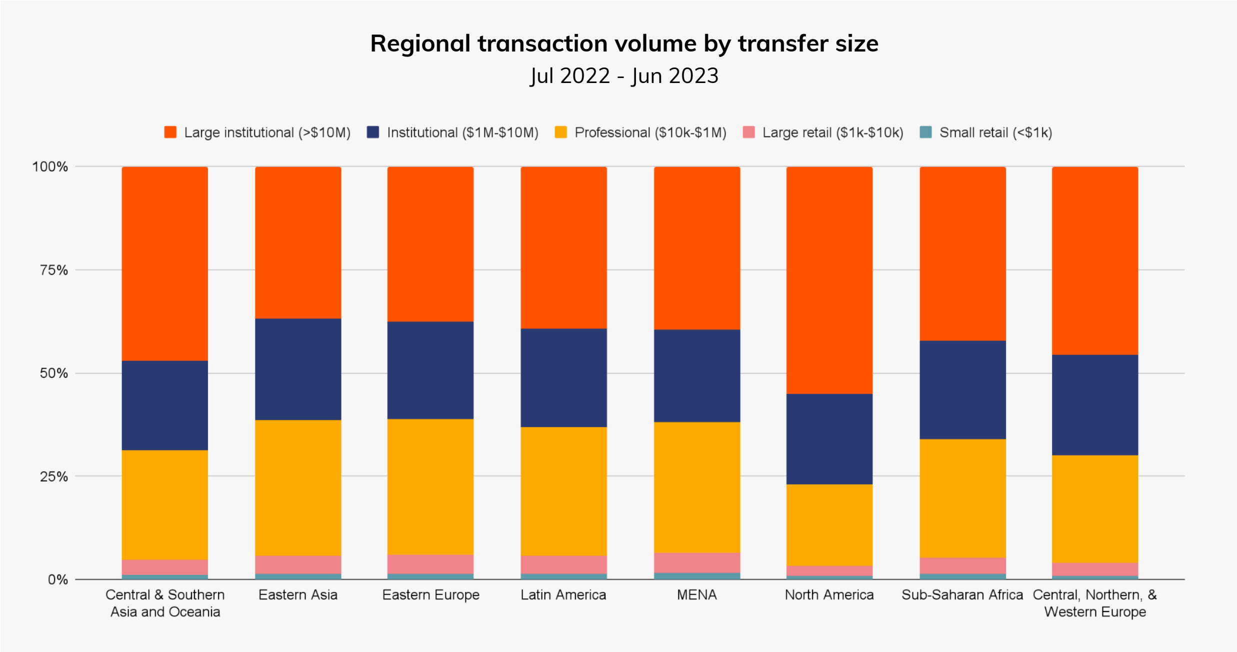
Compared to rest of world, Jul 2022 - Jun 2023

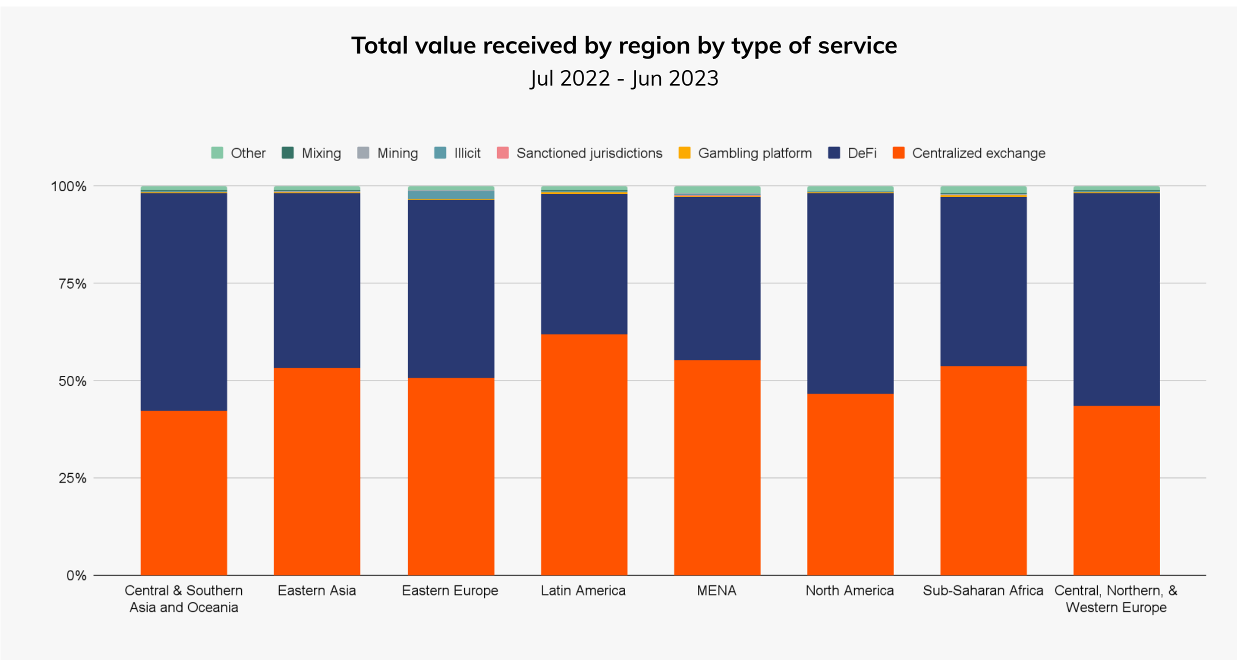


Central, Northern, & Western Europe: Countries by cryptocurrency value received

Jun 2022 - Jul 2023

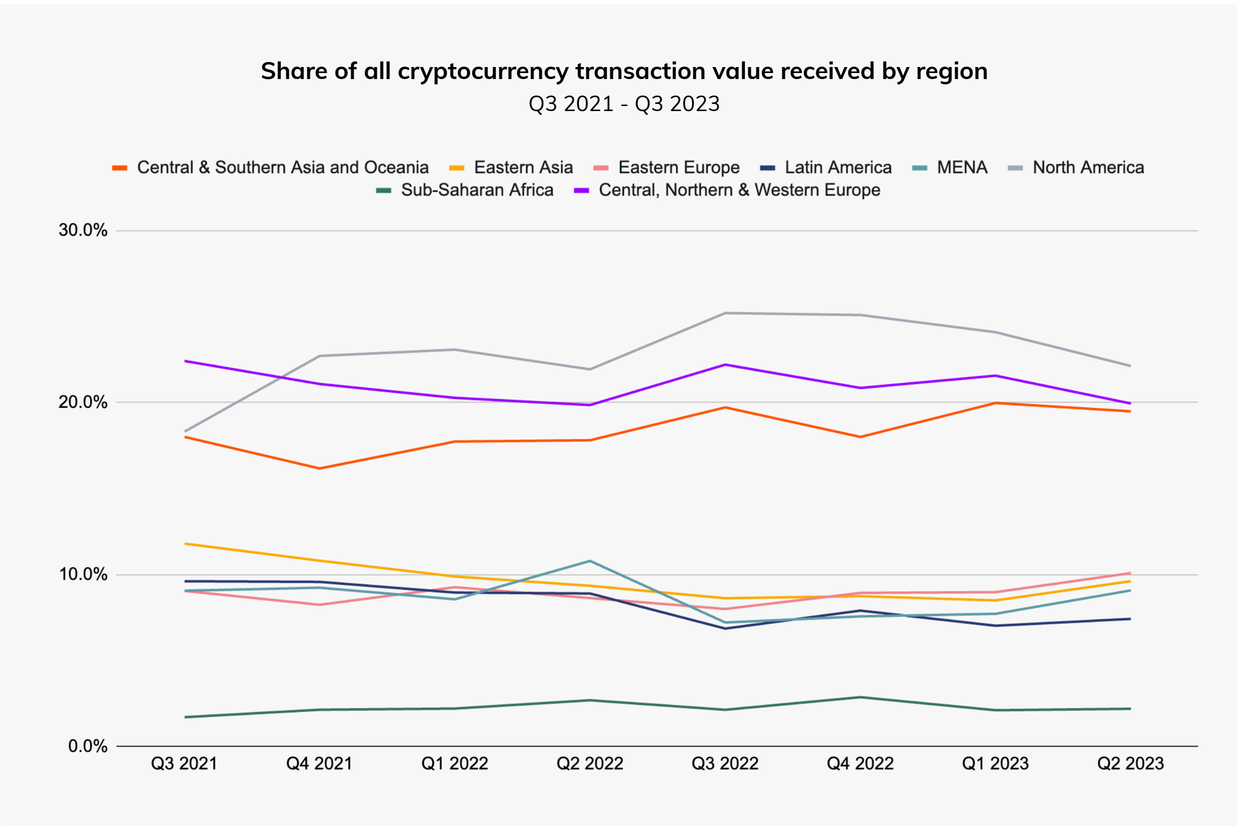



Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe


Total value received by region by type of service
Jul 2022 - Jun 2023
Other
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

Institutions in Central, Northern, & Western Europe Broaden Horizons with DeFi and Web3 Experimentation

Central, Northern, & Western Europe (CNWE) is the second-largest cryptocurrency economy in the world this year, behind only North America. The region accounted for 17.6% of global transaction volume between July 2022 and June 2023, and received an estimated $1 trillion in on-chain value during the same time period.

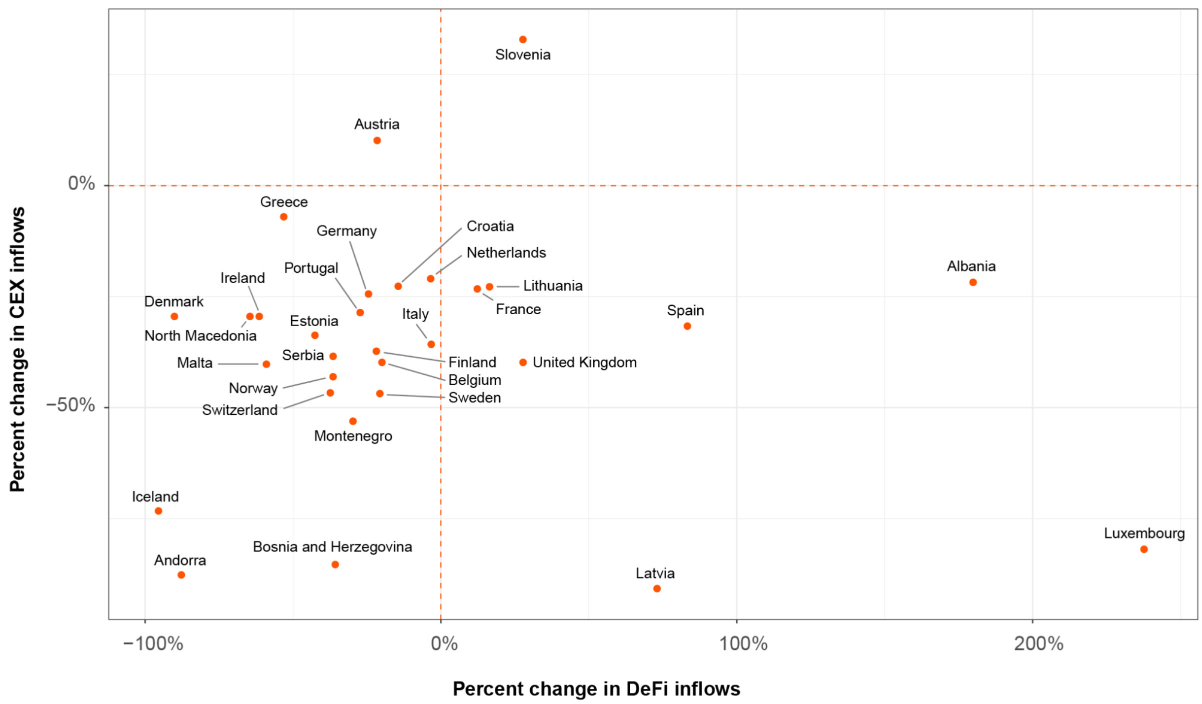


Across the region, decentralized finance (DeFi) is the most popular service category, accounting for 54.8% of cryptocurrency value received. DeFi has played a key role in CNWE's crypto adoption over the past few years, most notably with decentralized exchanges (DEXes). While much of this activity was driven by retail, institutions across the region are opening up to DeFi in light of regulatory frameworks that support diverse web3 initiatives.

When comparing inflows on both centralized and decentralized exchanges during the first six months of 2023 to the first six months of 2022, we see interesting differences in activity. First, 21 countries in CNWE experienced reductions in inflows to both types of exchanges. Seven countries saw an increase in inflows to decentralized exchanges: Albania, Luxembourg, Latvia, Spain, the United Kingdom, France, and Lithuania. Note that the two countries with the highest increases in DeFi activity — Albania and Luxembourg — are smaller in terms of overall transaction volume, thus making it comparatively easier to grow significantly.

Percent change in CEX and DeFi use in CNWE countries

Jan 2022 – Jun 2022 vs. Jan 2023 – Jun 2023

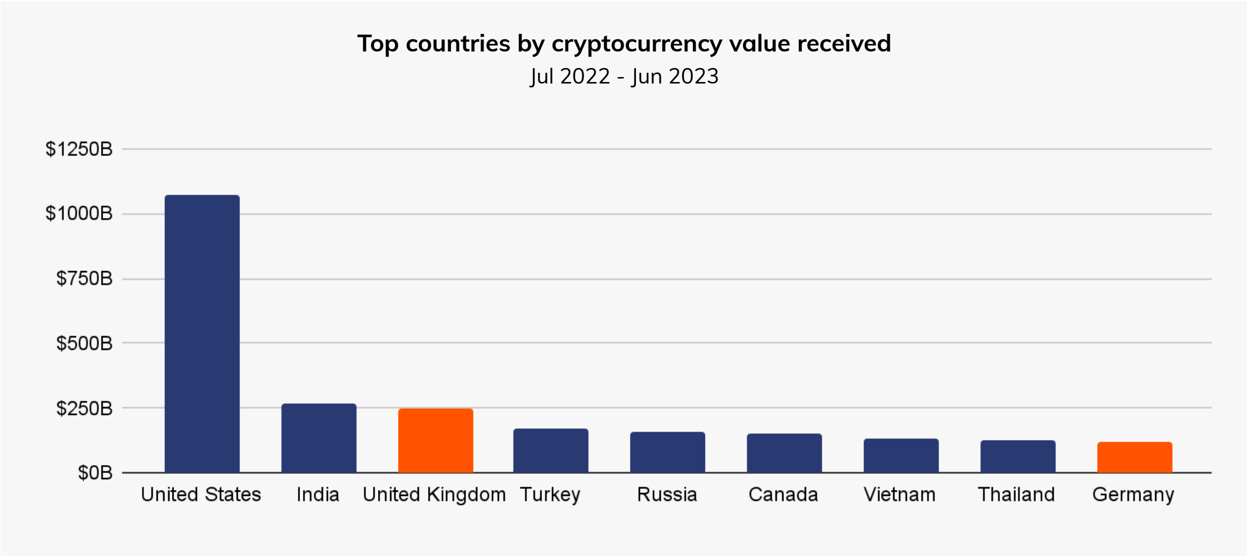


CNWE includes six of the 50 biggest grassroot adopters of cryptocurrency around the world based on our Global Crypto Adoption Index: the United Kingdom (14), Spain (22), France (23), Germany (26), Italy (37), and the Netherlands (39).

SPOTLIGHT

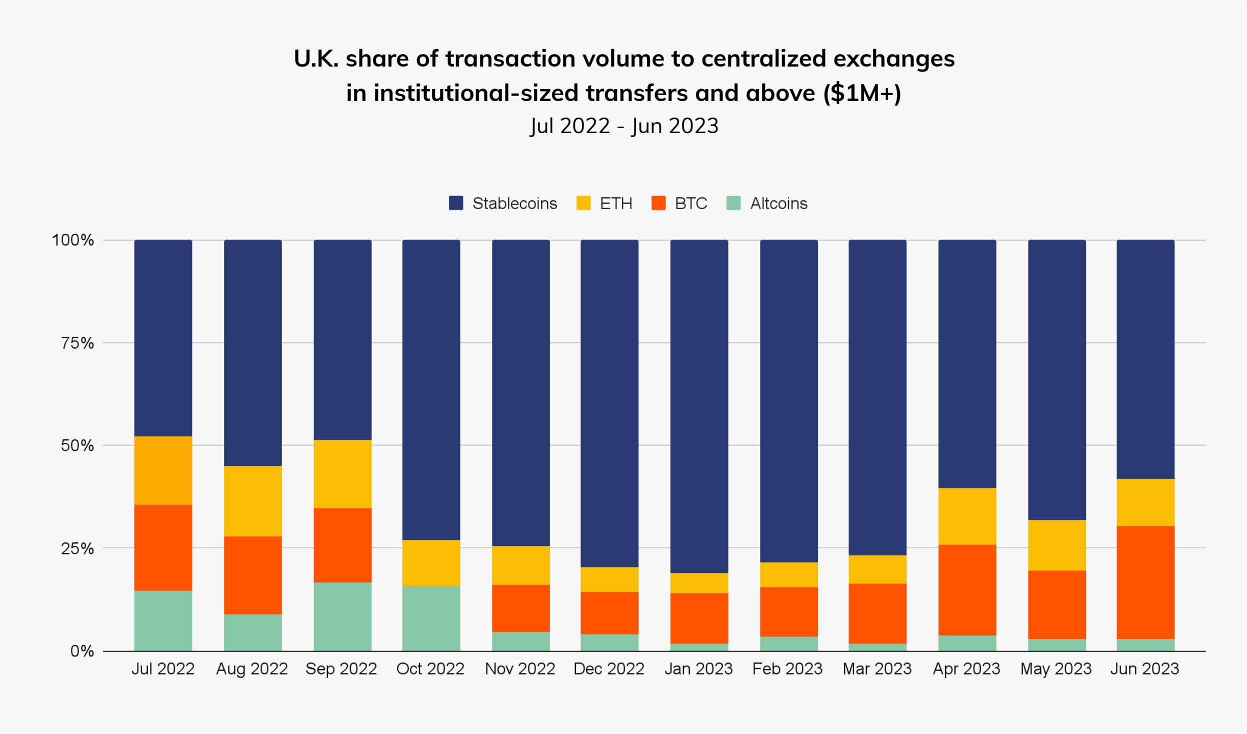
The United Kingdom is CNWE's biggest crypto economy

In addition to ranking 14th on our Global Crypto Adoption Index for grassroots adoption, the U.K. is third in the world in terms of raw transaction volume, at an estimated $252.1 billion received in the past year.



Jamie McNaught, Founder and CEO of U.K.-based crypto exchange Solidi, noted that U.K. consumers are focused on crypto from both a technological and investing standpoint. He stated, "Customers in the U.K. typically seek alternatives to poor savings and investment returns — varying from propping up underperforming investment portfolios to customers going all in, looking for high returns on tokens or NFTs. While NFTs are no longer in favor, customers continue to look for overperforming, long-term returns in Bitcoin — particularly with the anticipated 2024 halving — and Ethereum, while also making sizable bets on XRP, Cardano, and Solana." McNaught added that the U.K.'s institutional crypto growth is not surprising, given the country's reliable and connected banking sector, and its history of relatively low inflation, until recently.

It appears that this activity has not been dampened by the U.K.'s regulatory developments; regardless, reactions to recent legislation have been mixed. In June 2023, the Financial Services and Markets Bill became U.K. law, adding a definition of crypto assets to existing financial services legislation while also granting the government powers to create a bespoke framework for stablecoins. The data suggest that the passage of the bill may have impacted stablecoin activity. In the months leading up to the enactment, the share of institutional transaction volume (based on transfer sizes) to centralized exchanges decreased and was replaced by an increase in Bitcoin and Ether shares.



Some financial institutions, such as venture capital firm Andreessen Horowitz (a16z), viewed the Financial Services and Markets Act 2023 (FSMA 2023) as a positive step forward. Soon after the bill was passed, a16z Founding Partner Chris Dixon announced, “we're thrilled to open our first international office in a jurisdiction that welcomes blockchain technology and is committed to creating a predictable business environment by pursuing regulations that both embrace web3 and protect consumers. We look forward to helping foster the growth of the UK web3 ecosystem while the proper regulations come online.” McNaught explained that it may take a while before the crypto industry in the U.K. sees significant tangible impact from the Act and other regulatory developments that are in progress. “We're still waiting on additional rules bringing activities in scope under the Designated Activities Regime. We expect to see most stablecoins as well as a significant number of tokens brought in scope with further secondary legislation. For most crypto firms, the main focus right now is the introduction of the FCA Financial Promotions Regime in October 2024. This covers all buying and selling of crypto assets — the listing of a price and a buy button is considered a financial promotion.” From October 8, 2024, firms must meet FCA standards or they won't be able to lawfully communicate crypto-related financial promotions to customers in the U.K.

Indeed, businesses such as crypto exchange Luno and crypto-friendly payments provider PayPal, announced their intentions to pause U.K. customers' abilities to purchase certain cryptocurrencies, citing time needed to become compliant with the FCA's new laws. McNaught concluded, “Firms need certainty and clear guidance, delivered by the regulator in a timely manner, particularly when the adherence to regulations poses significant challenges or has the potential to cause significant harm toward consumers.”

How Markets in Crypto-Assets (MiCA) has impacted crypto innovation in the EU

In June 2023, the European Union approved the Markets in Crypto-Assets (MiCA) Regulation, putting in place a unified approach toward regulating crypto activities in all EU countries. MiCA's provisions will take effect starting from mid-2024 and aim to promote financial stability and market integrity by establishing a single licensing regime that will supervise public offers of crypto assets, trading, and institutions involved in the digital asset space. Already, MiCA appears to have created favorable environments for crypto innovation. We spoke to industry leaders in France, Italy, and Germany to gain insight into these impacts.

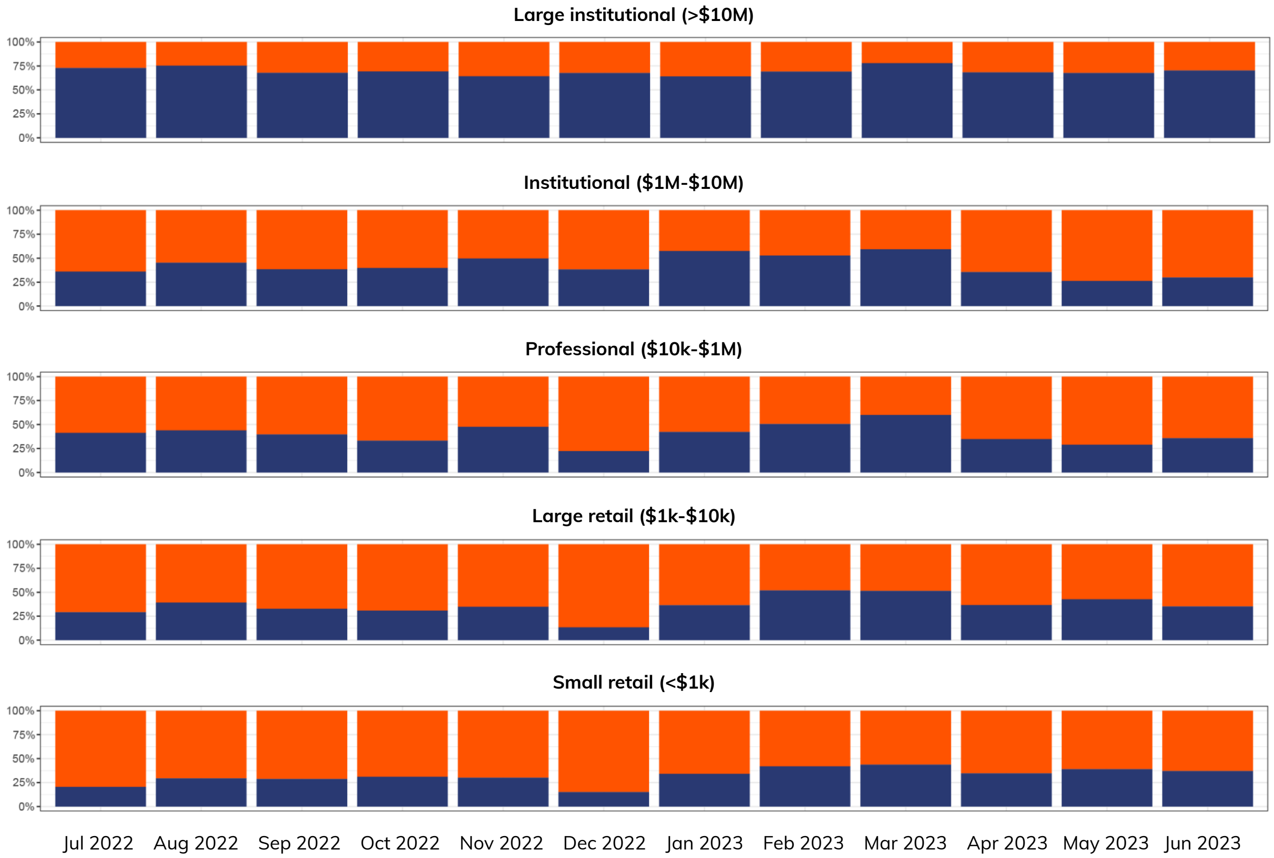
In France, the Autorité des Marchés Financiers (AMF) immediately welcomed MiCA and soon drafted additional supportive technical standards for the industry as the country moves toward the MiCA licensing regime. Lorie Veillere, Lead Compliance at Paris-based cryptocurrency market maker and financial services platform Flowdesk, believes these regulatory developments are primary drivers for France's crypto adoption. "Even before the introduction of MiCA, France's attitude toward crypto regulation was broadly supportive," she stated. "For example, the 2019 PACTE Act introduced France's first regulatory framework for crypto assets and detailed that crypto entities must demonstrate that they have implemented an AML-CFT framework in order to be registered as a Digital Asset Service Provider (DASP)."

At the same time, France's crypto hub in Paris has been flourishing. Société Générale obtained France's first crypto license in June 2023 to offer its institutional clients improved custody, trading, and sales opportunities. Major players in the space, including Binance, Crypto.com, and Circle, chose Paris as their European headquarters. And blockchain developers have flocked to the city to work on decentralized projects. These advancements likely contributed to France's ranking of number 23 on this year's Global Crypto Adoption Index and number four in the region in terms of raw cryptocurrency transaction volume.

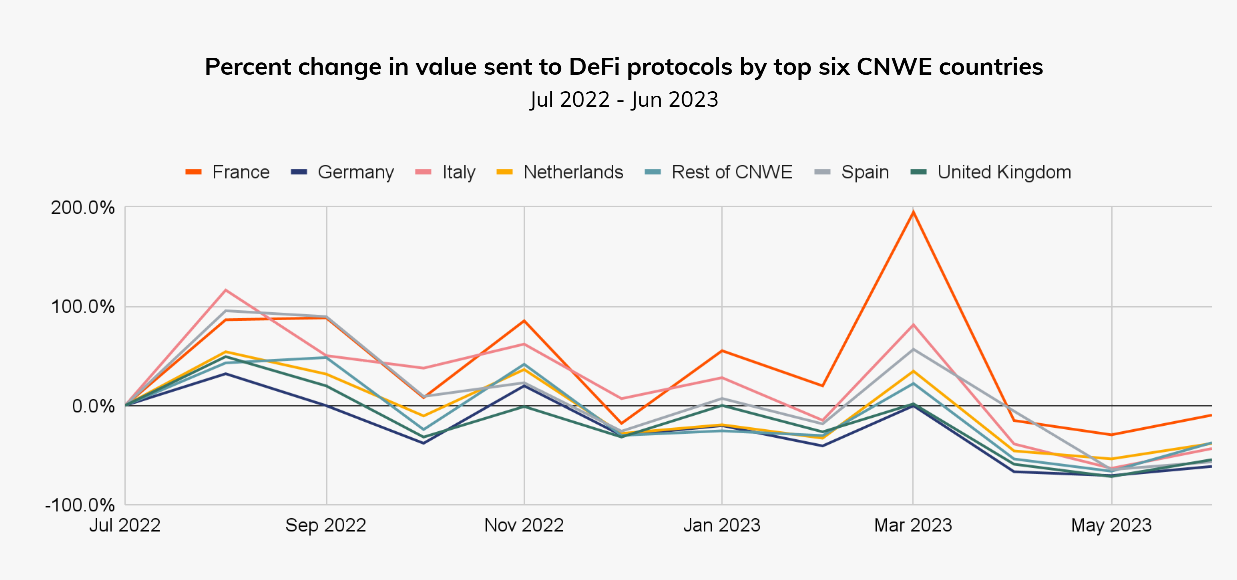
Many larger digital asset players in France appear to be prioritizing DeFi exploration, which is reflected in our data. As the below chart illustrates using transaction size data, large institutional-sized transfers occur more often in DeFi than on centralized exchanges. These levels have remained relatively steady over the past year.

Share of transaction volume by transfer size: Defi vs CEXes in France

Jul 2022 - Jun 2023



France also emerges as a leader in growth in DeFi transaction volume. The higher spikes around November 2022 and May 2023 shown in the below chart were likely driven more by users seeking to trade on volatility caused by the collapse of FTX and the decline of Silicon Valley Bank and USDC prices, respectively, rather than regulatory developments across Europe. Regardless, growth in France was typically more pronounced than in other countries during these periods, illustrating its strong DeFi presence.



Veillere concluded that France's future as a crypto hub depends on additional regulatory progress. "French regulators and public authorities frequently consult industry leaders — often those with knowledge of DeFi — to obtain insights on the state of the sector and technical developments. The most recent consultation occurred in May 2023. This proactive approach could enable the implementation of one of the first efficient DeFi regulatory frameworks."

It is possible that MiCA will also be a driving force for crypto growth in Italy, especially in cities with tech-savvy populations where crypto initiatives are already on the rise. Nearly three years ago, Banca d'Italia created the FinTech Milano Hub, a modern update to Milan's financial district where industry leaders in both the private and public sectors collaborate on digital initiatives. Several months after MiCA was approved, Banca D'Italia partnered with Cetif Advisory to help institutions explore DeFi and tokenized assets. This project is currently utilizing Ethereum-based Layer 2 protocol Polygon Labs and tokenization platform Fireblocks to achieve its aims. As Alessandro Perillo, Chief Operating Officer of Italy-based Young Platform told us, "The FinTech Milano Hub is poised to be a critical player in fostering crypto innovation in Italy. Given Italy's robust financial sector and technological capability, the hub could potentially lead innovations in blockchain technology, DeFi applications can perhaps even pioneer new ways to integrate cryptocurrency into traditional finance."

Germany is another country in the region that offers some of the key elements necessary for crypto growth. Dr. Sven Hildebrandt, Executive Director of Business Development and Strategic Partnerships at Boerse Stuttgart Digital, a fully regulated infrastructure partner for crypto and digital assets in Europe, told us about some key drivers for crypto adoption in Germany, including trustworthy regulation and education provided to investors by institutions. Additionally, he noted that, "Germany has a very strong historical routing in technical blockchain development. For example, if you look for node operations, you will find that Germany has the second most full nodes for Bitcoin after the U.S., which is remarkable. Germany also has the largest number of web3 jobs in absolute terms with over 22,400 jobs in the crypto and blockchain sector."

In April 2023, the German government approved the Future Financing Act (“ZuFinG”), which monitors crypto asset custody and provides insolvency protection. Since then, we’ve seen several institutional developments. Boerse Stuttgart Digital is working on a fully insured crypto staking service in collaboration with Munich Re, which is expected to go live in the first half of 2024. Other innovations include Deutsche Bank’s partnership with Taurus to explore crypto custody and tokenization, and the German-Dutch central banks’ “Project Atlas” to map on-chain transactions.

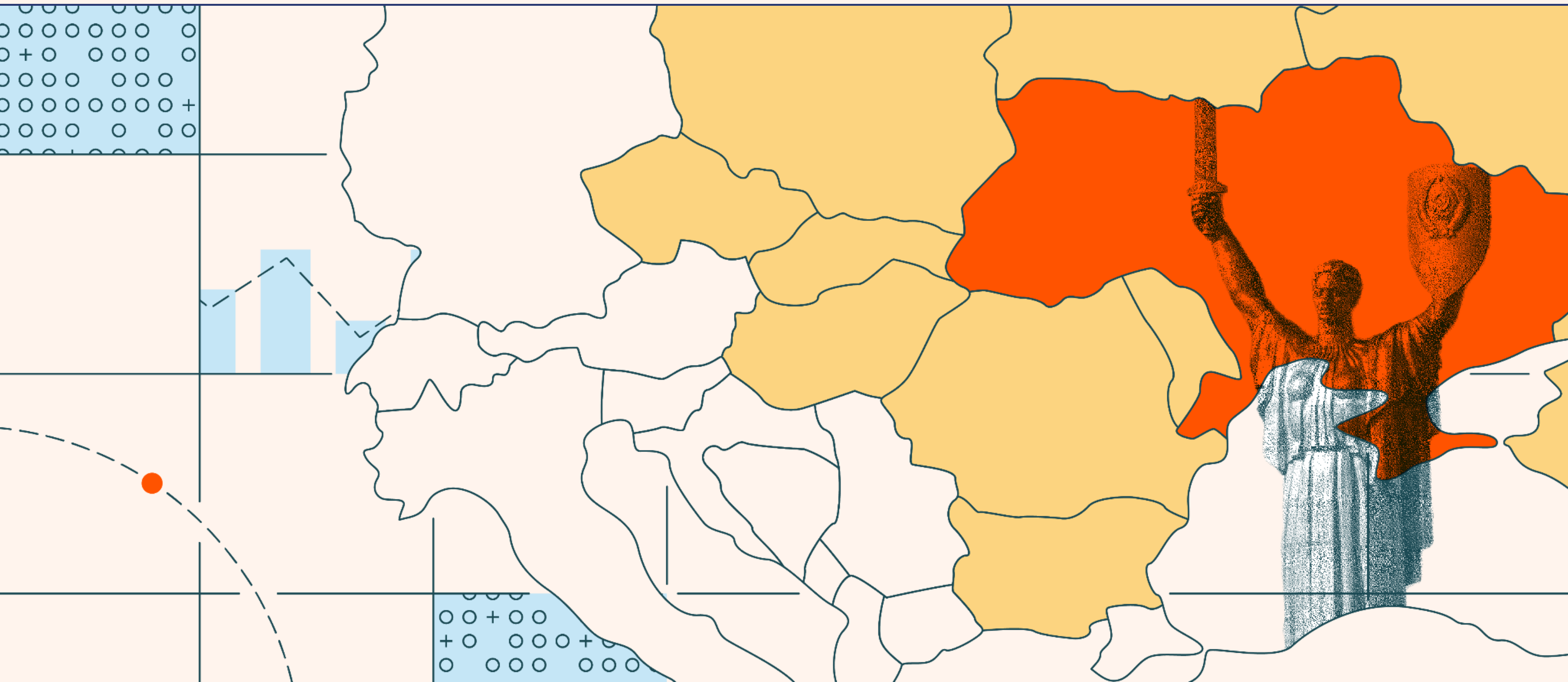
Dr. Hildebrandt believes that the effects of these acts are not yet tangible to the general public, however, given that most developments happen in the background. Regardless, these acts represent significant progress in the right direction. “Overall, MiCA paves the way for broad acceptance of cryptocurrencies and digital assets. Its uniform, clear rules and focus on consumer protection throughout the EU create a secure environment that strengthens trust in the market and opens doors to crypto for both individual investors and institutions.”

CNWE’s crypto future

Although crypto is still arguably in its early stages, many industry leaders are excited about what’s to come. Perillo stated that the potential for innovations — especially in areas like smart contracts, NFTs, and DeFi — is immense. “It will be interesting to see how traditional financial institutions, tech startups, and regulators navigate through the challenges and opportunities presented by the crypto space.”

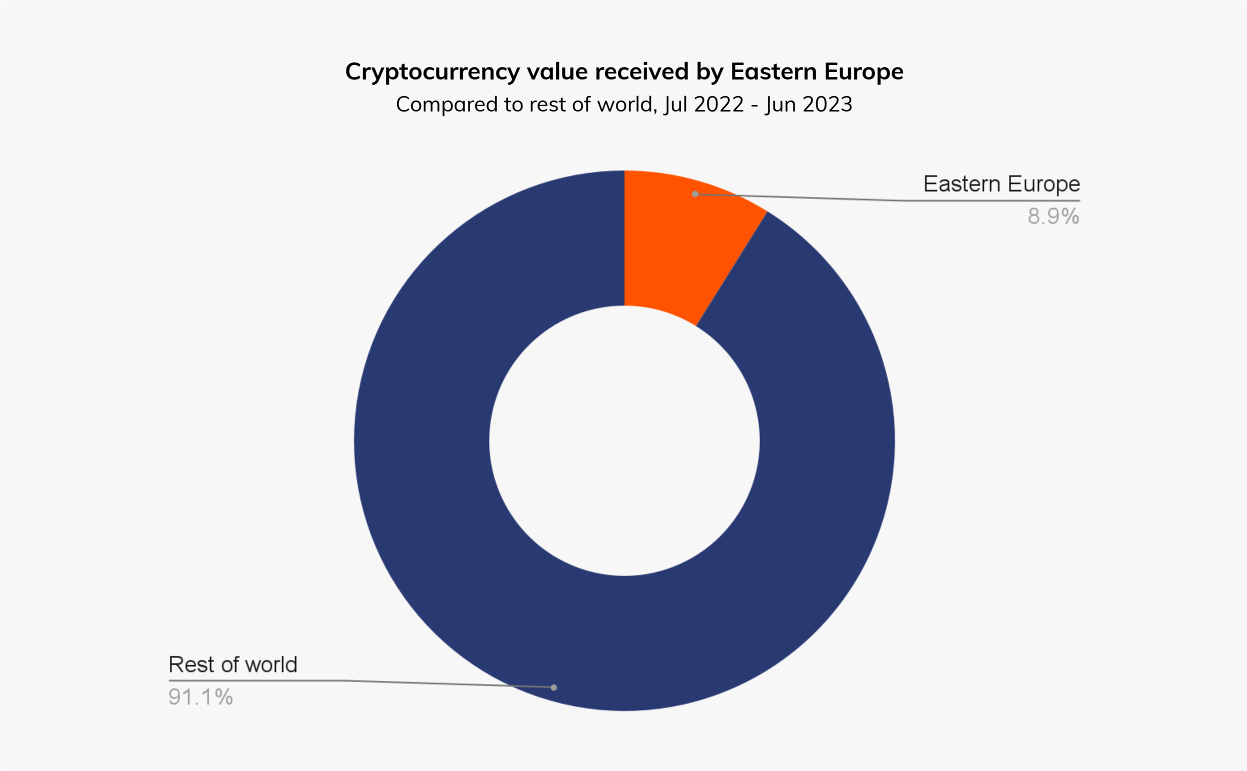
As these new opportunities and challenges emerge in the industry, regulations like MiCA will continue to play key roles. However, as Veillere notes, “much remains to be done, particularly in terms of harmonizing the regulatory framework for all European countries. Concerning MiCA’s future, I think the text will undergo several amendments before a real balance is found between the requirements of the regulators, the crypto players, and the political will to expand this sector.”

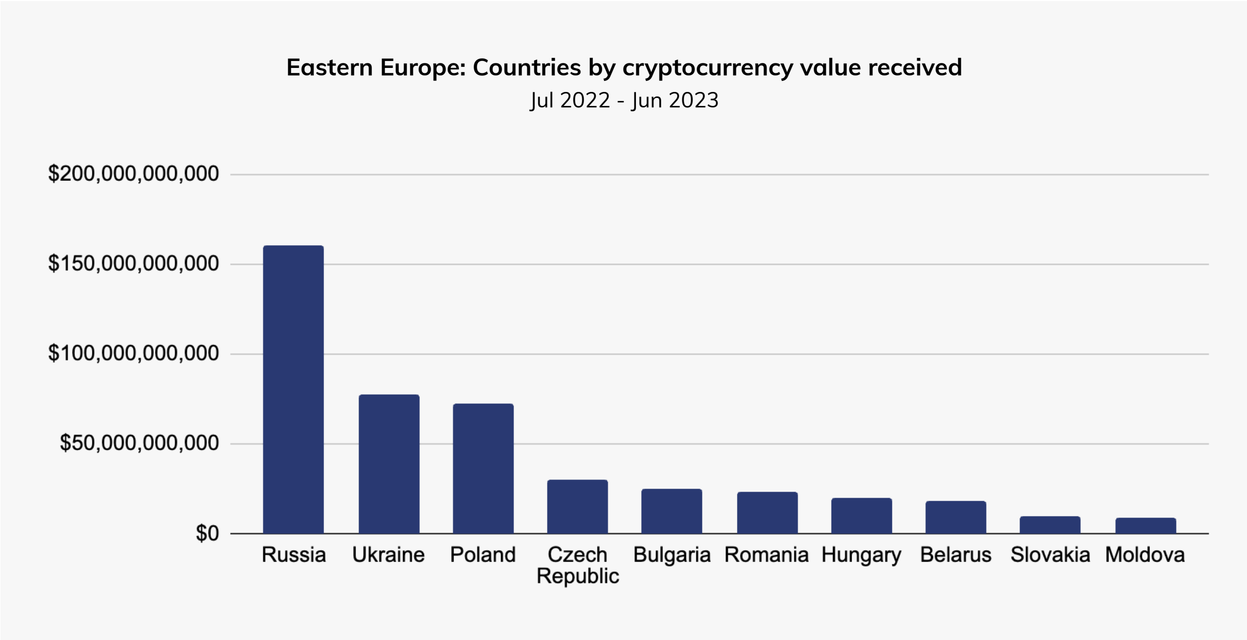
Eastern Europe

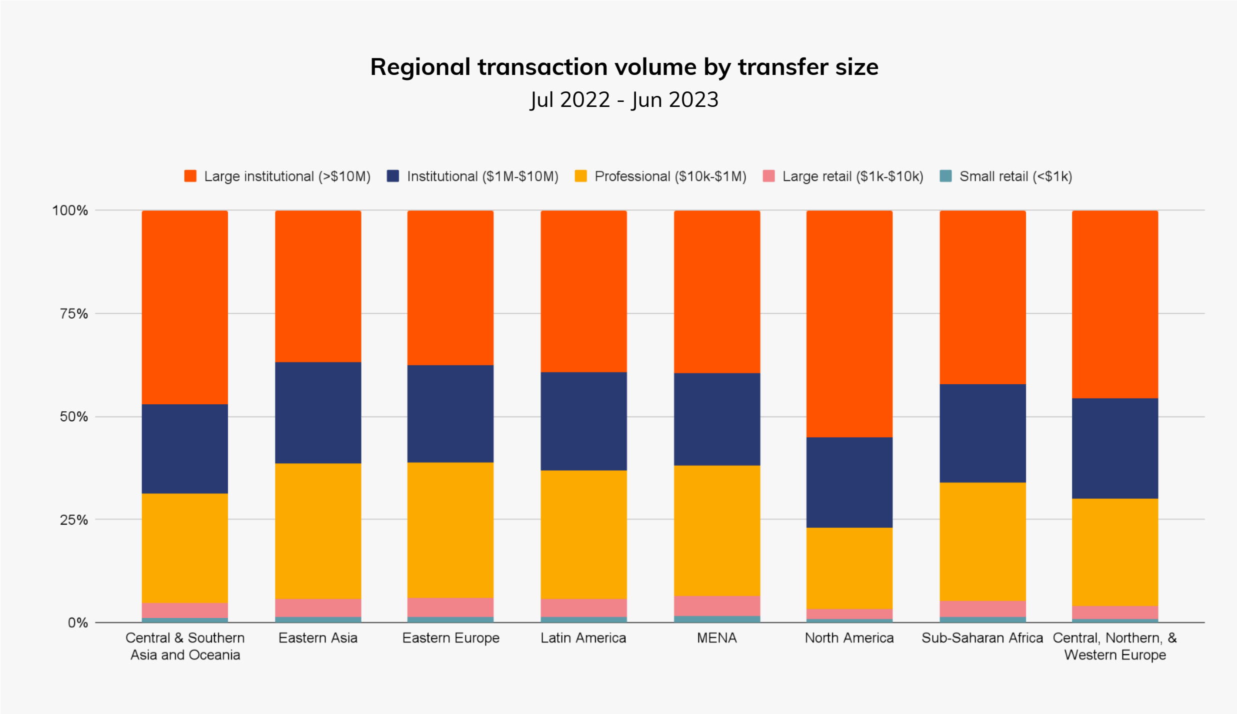


CRYPTOCURRENCY ACTIVITY SUMMARY

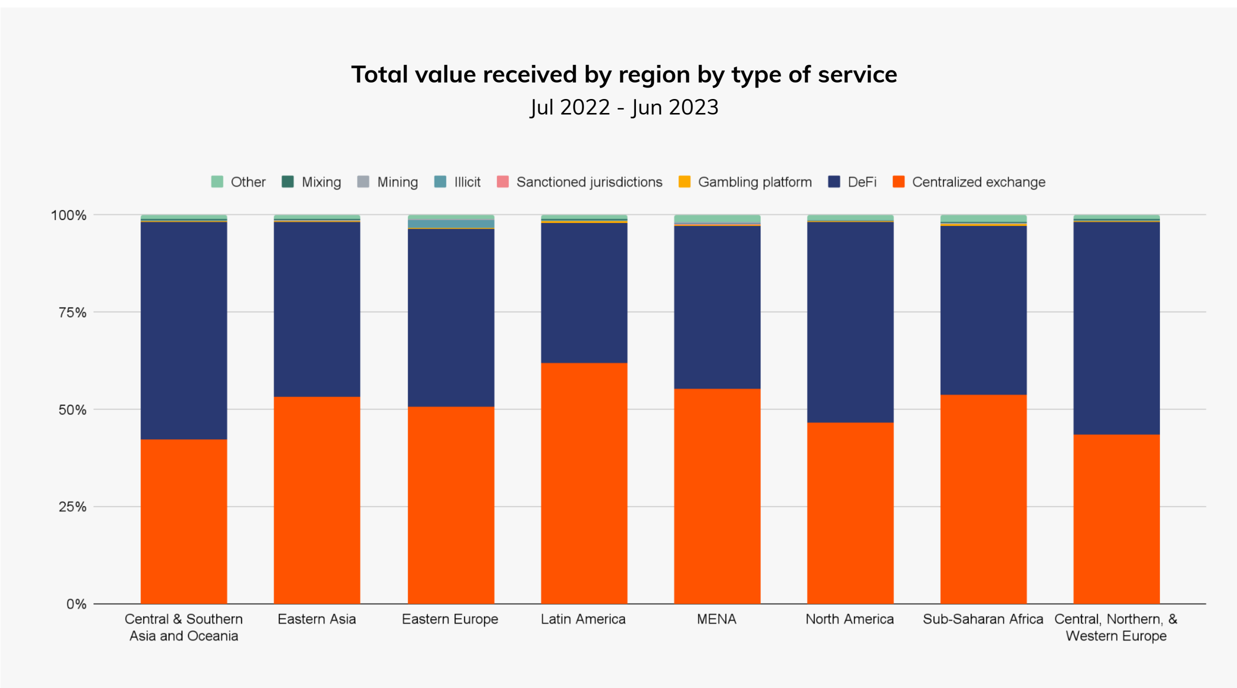
Eastern Europe







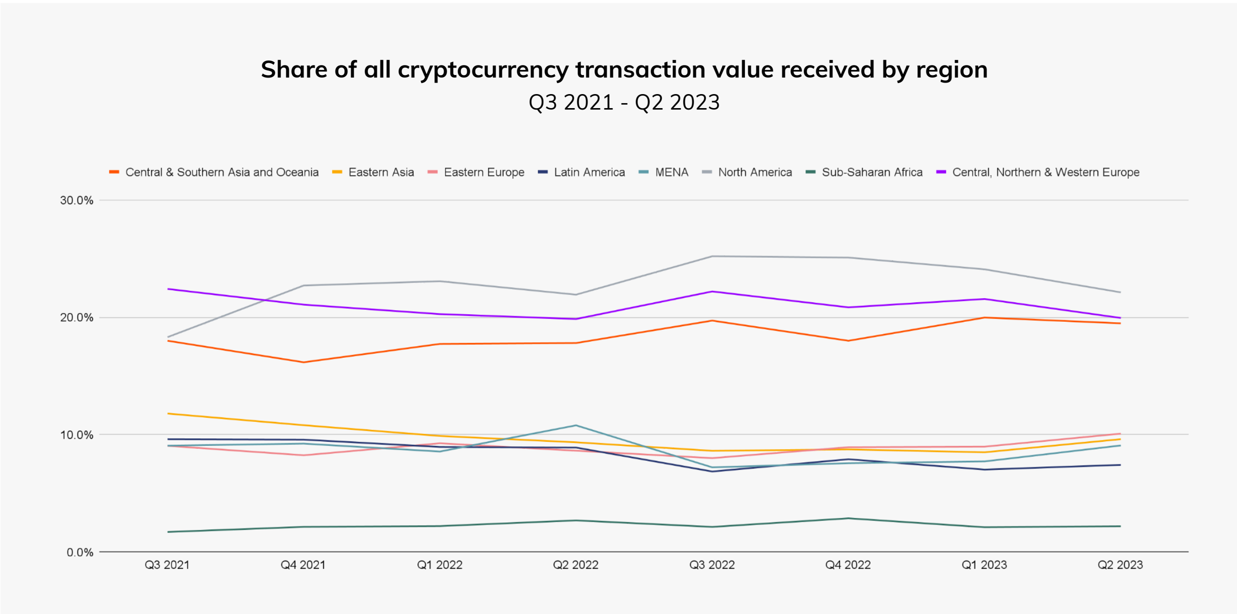
Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe



Total value received by region by type of service
Jul 2022 - Jun 2023
Other
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

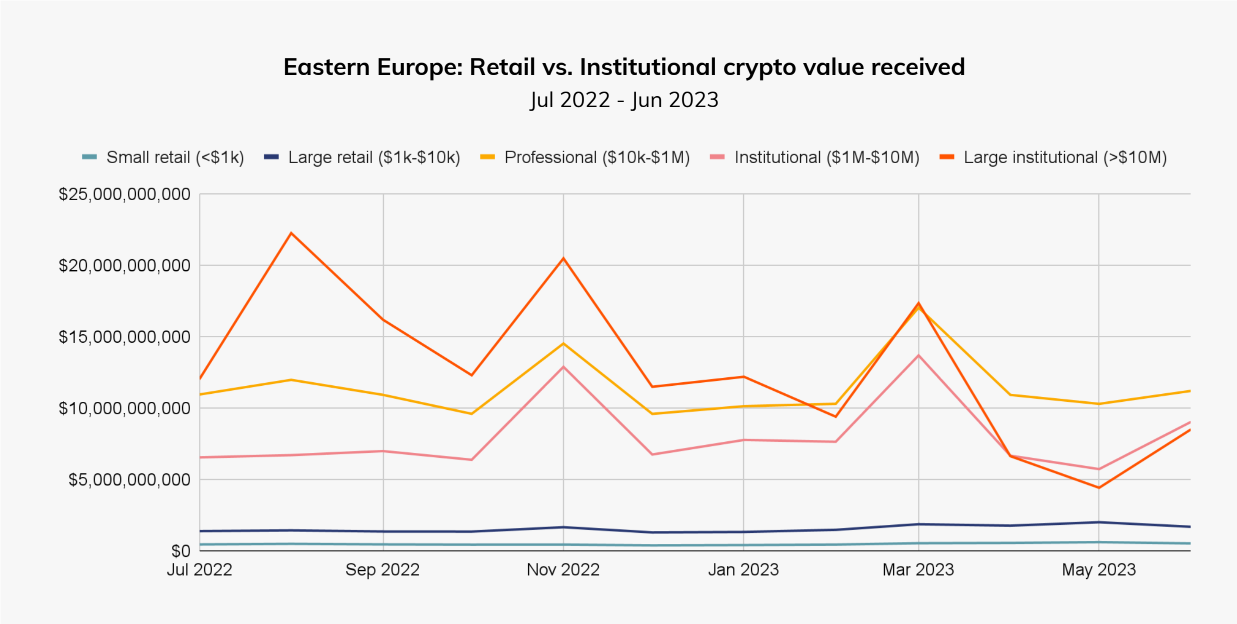
Grassroots Crypto Adoption Continues in Eastern Europe Despite Russia-Ukraine War

Eastern Europe is the fourth-largest cryptocurrency market we study, with $445 billion in value received on-chain between July 2022 and June 2023. That value represents 8.9% of global transaction activity during the time period studied.



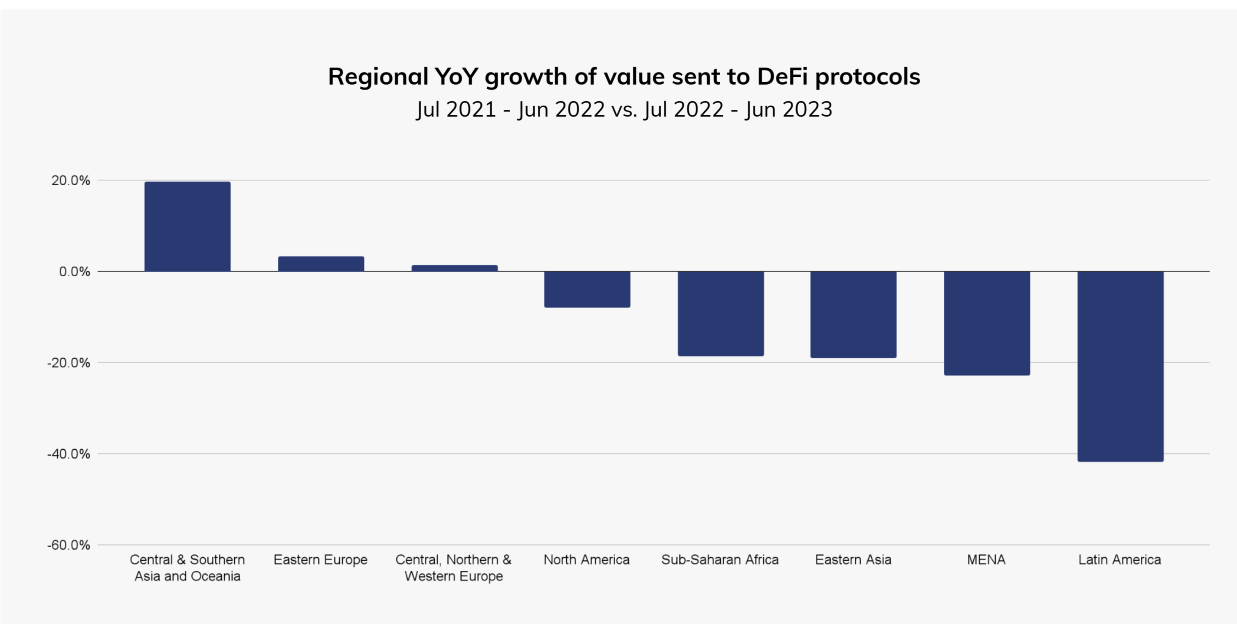
As shared at the outset of this report, crypto usage fell in most regions of the world, and Eastern Europe was no exception. In the past year, raw transaction volume in this region decreased by 22%, in line with the decline seen globally during that time frame. And while other region's economies show signs of recovery from crypto winter, Eastern Europe still contends with economic impacts from the Russia-Ukraine War, which we'll discuss in more detail later.

Going a level deeper in the data, interesting trends emerge when we break down Eastern Europe's cryptocurrency activity by transaction size. Despite three spikes in the time period studied, large institutional transaction volume has been on a steady decline. However, smaller institutional transaction volume has stayed relatively steady despite some periods of volatility, and professional-sized transaction volume has trended above both. Retail transaction volume has also remained steady. All in all, the data suggests that while the region's biggest crypto users have dialed back their activity amidst crypto winter, the rest remain committed to the asset class.



As we've seen in other regions, the biggest ebbs and flows in Eastern Europe's crypto activity have coincided with tumultuous market events like the FTX collapse at the end of 2022, as well as the Silicon Valley Bank, Silvergate Bank, and Signature Bank shutterings in March. Transfer size data shows that institutional crypto investors in particular changed their behavior most during this time period.

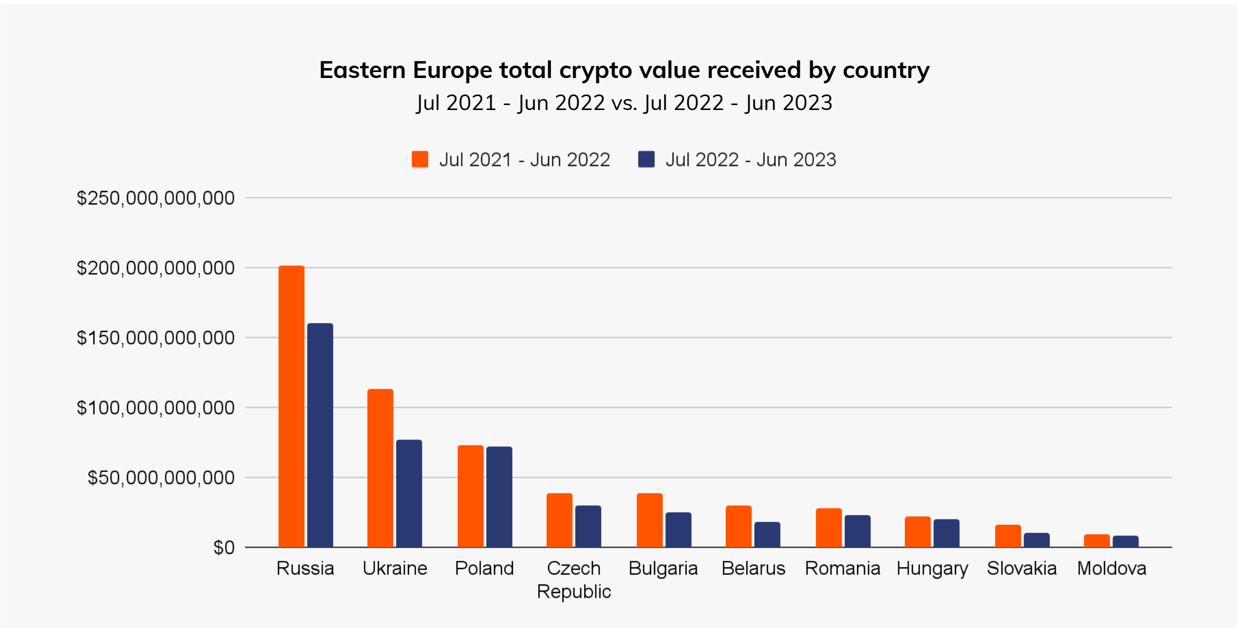
One notable positive trend for the region is in DeFi. Eastern Europe was one of only three regions to see an increase in DeFi activity at 3.0%.



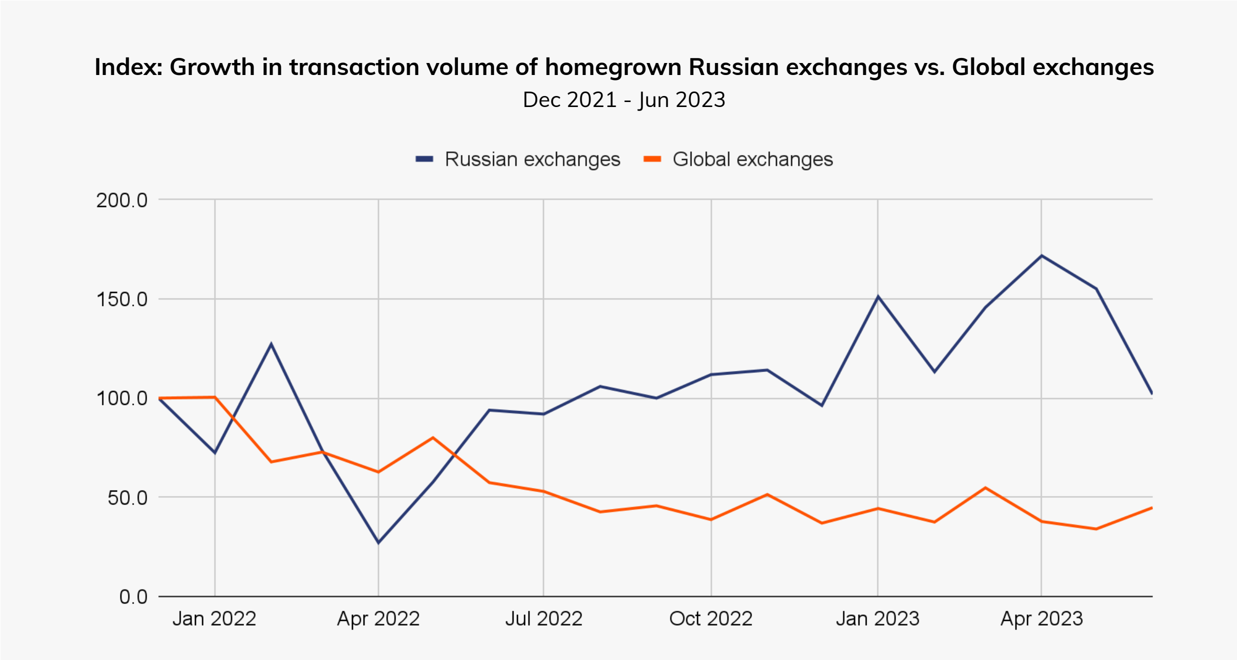
It's complicated to determine what may have caused this uptick, but uncertainty around regional regulations and crypto market shakeups may have been a contributing factor. In the past, we've observed that investors turn to DeFi when problems arise with centralized exchanges or in times of market crisis, likely because of the greater control over funds DeFi gives users due to protocols' non-custodial nature.

Crypto use remains steady even as dollar figures fall

When it comes to crypto adoption, Ukraine and Russia are typically mainstays on the world's stage. Though still the regional leaders for crypto usage — both in raw transaction volume and grassroots adoption — Ukraine and Russia also saw the biggest year-over-year decreases in crypto transaction volume of any Eastern European countries, at $35.8 billion and $40.9 billion respectively. Grassroots adoption dropped as well both in total and compared to other countries, with both Ukraine and Russia falling two and four places respectively in our Global Crypto Adoption Index.



This decline is likely driven by the ongoing war between the two countries, but in different ways. Russia's decrease is likely driven at least in part by the economic sanctions from the United States, the European Commission's complete crypto ban against Russia last fall, and a general decline in willingness by companies to do business in Russia following the invasion. One piece of evidence is the more than 50.0% decline in Russian usage of the world's biggest international exchanges since the months preceding the war, as we see on the index below. That may be in part attributable to restrictions some international exchanges placed on Russian users and banks due to the war. Concurrently, we also see growth in transaction volume on exchanges primarily serving Russia, which aren't introducing such restrictions.



While Russian transaction volumes on international exchanges are still bigger overall than on local exchanges, the opposite trends in usage indicate that at least some Russian users may be turning to local exchanges. But overall, we believe that the restrictions are hurting Russia's market, along with the same economic headwinds affecting crypto users in other parts of the world.

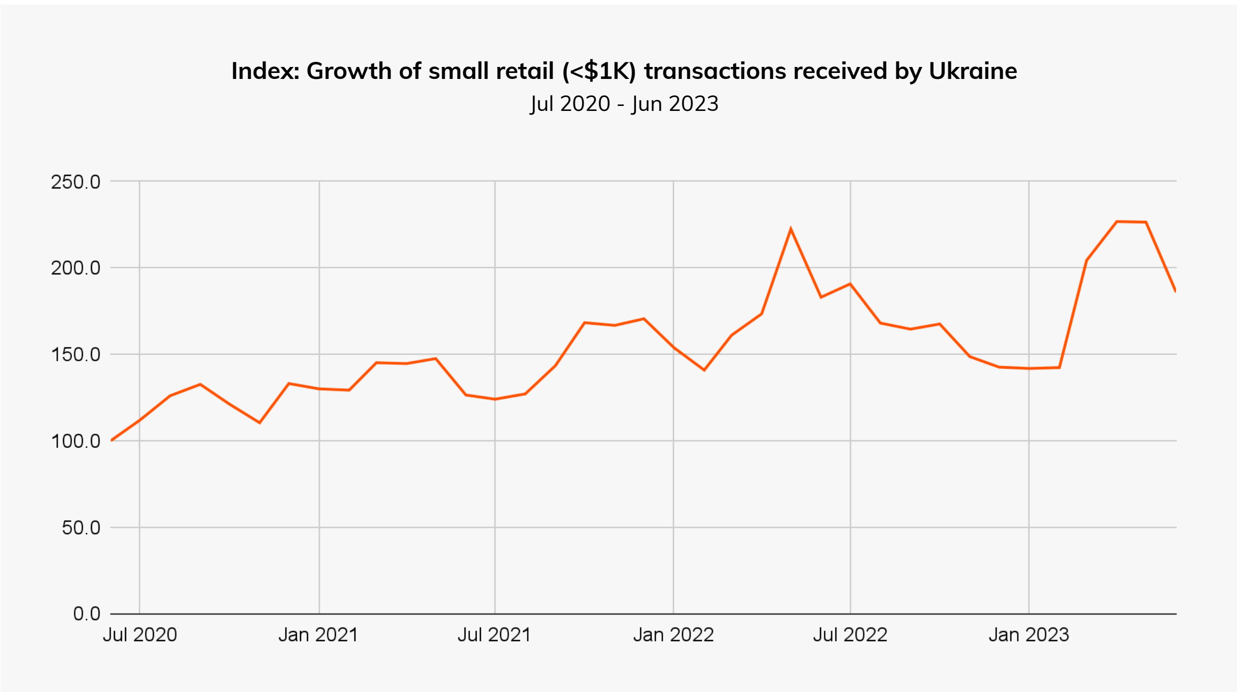
In Ukraine, on the other hand, we believe that declining volumes are driven more by extreme economic difficulties brought on by the war, as well as the migration of many Ukrainian residents and businesses — including crypto platforms — to other parts of Europe.

Kuna is one such example of a Ukrainian crypto business that has relocated due to the war, as it moved its headquarters to Lithuania this year, and has pivoted its business toward the European market. The company has several banking clients there, and has developed Kuna Pay, a B2B solution for crypto payments that provides on and off-ramps. Kuna is also in the process of developing and obtaining the necessary licensure for staking products as well as creating a crypto-custodying solution that Ukrainian banks can use once regulations permit. While discussing these developments, Anna Voievodina, Chief Legal Counsel of Kuna Exchange said, "The war made us faster."

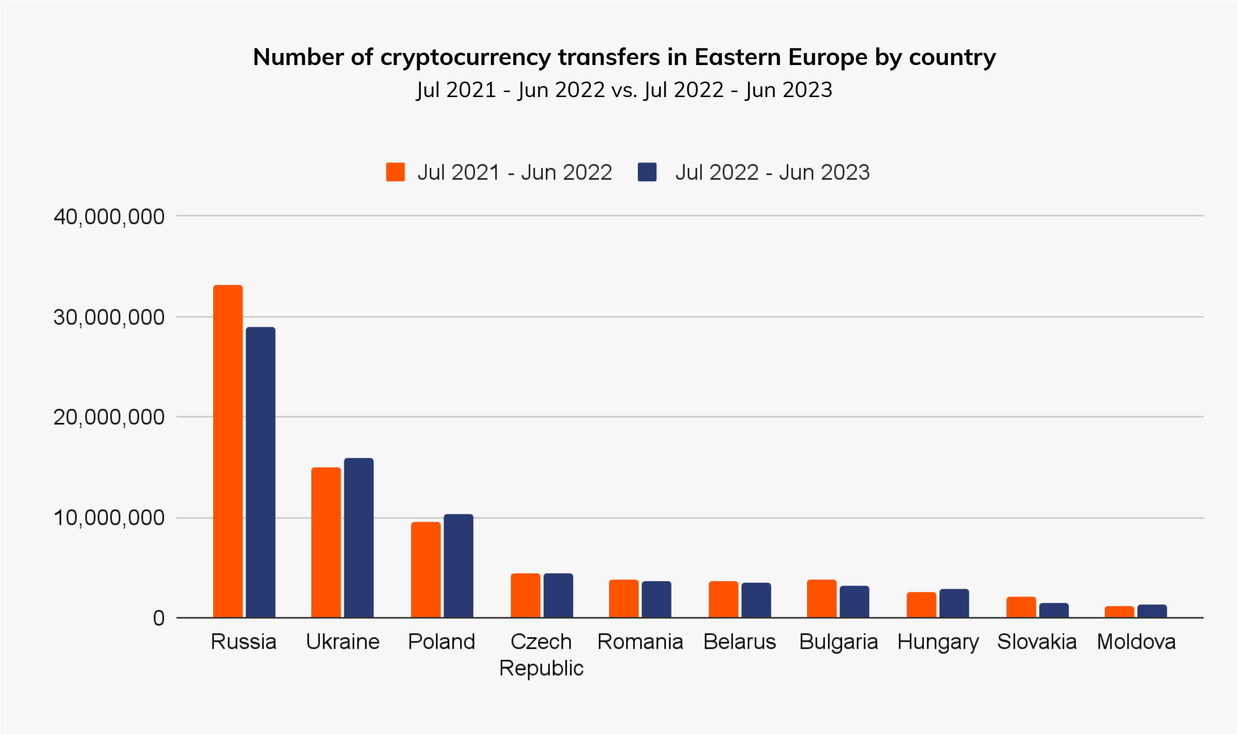
She went on to explain that in Ukraine, crypto usage is complicated. On February 17, 2022, the Ukrainian Parliament passed crypto regulation, and the following week, Russia invaded the country. In the months that followed, while millions in crypto donations poured into Ukraine to support its army, some interventions related to the war impacted crypto usage. For instance, the National Bank of Ukraine (NBU) instituted a ban on buying crypto using the Ukrainian hryvnia to "prevent unproductive outflow of capital from the country" and save its national currency. Restrictions have since loosened, and Voievodina says Ukrainians have become even more interested in crypto and are learning about its opportunities.

In spite of the damage war has wrought on Ukraine and its crypto ecosystem, some positives have emerged. Since the European Union [extended protection]() till March 3, 2025 for people fleeing war-torn areas, those refugees are being treated as residents of the EU. Taking advantage of those rights, many are adopting new behaviors like using crypto platforms governed by EU regulations, which are more evolved than crypto frameworks in Ukraine.

Voievodina said, “Since the Ukrainian economy is going down and towns are being destroyed, people are leaving. Now those Ukrainians living under European legal order are using financial instruments they weren’t using before. People are looking for new options and aren’t afraid of KYC as they used to be.” She explained that those Ukrainians are now using crypto for everyday purposes like savings, making donations, and sending remittances back home. In fact, in the last year we estimate remittances sent to Ukraine rose significantly. The chart below shows a rise in small retail transactions, the amounts of which match the size of payments typically sent for remittances.



Data on the number of individual crypto transfers, as opposed to just transaction volume, also indicates that crypto usage remains consistent in Eastern Europe. Though Eastern Europe’s transaction volumes have fallen year-over-year, the number of transfers has remained consistent nearly everywhere except for Russia, and has even grown in places like Ukraine and Poland. This suggests that residents of those countries are still using crypto at roughly the same pace.



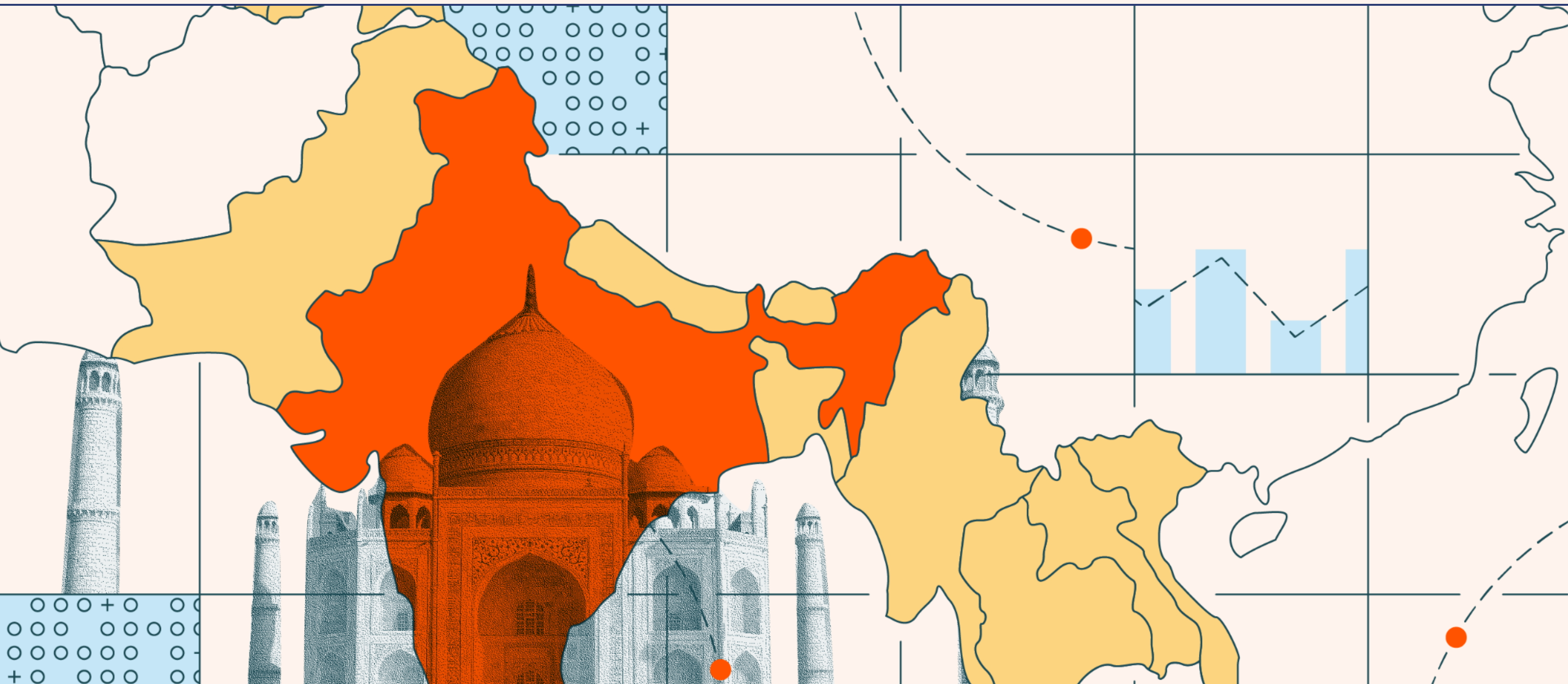
Even in Russia, where the number of individual transfers declined, the drop was small in proportion to the decrease in transaction volume, at 12.8% versus 20.4%. The data above suggests that Eastern Europeans are still getting benefits from cryptocurrency and using it with a similar frequency they did previously, but with less money to actually put into the asset class.

As for future crypto growth in the region, Voievodina believes that Ukrainians becoming more integrated with the EU will drive faster crypto adoption. She also discussed efforts being made to create a new bill that's compliant with MiCA (Markets in Crypto Assets Regulation), and believes that regulations designed to protect the consumer market will be good for Ukraine. "Governments are recognizing they'll be left out of the financial market opportunity if they aren't developing crypto regulation," she said.

Everyday people are still using crypto in Eastern Europe

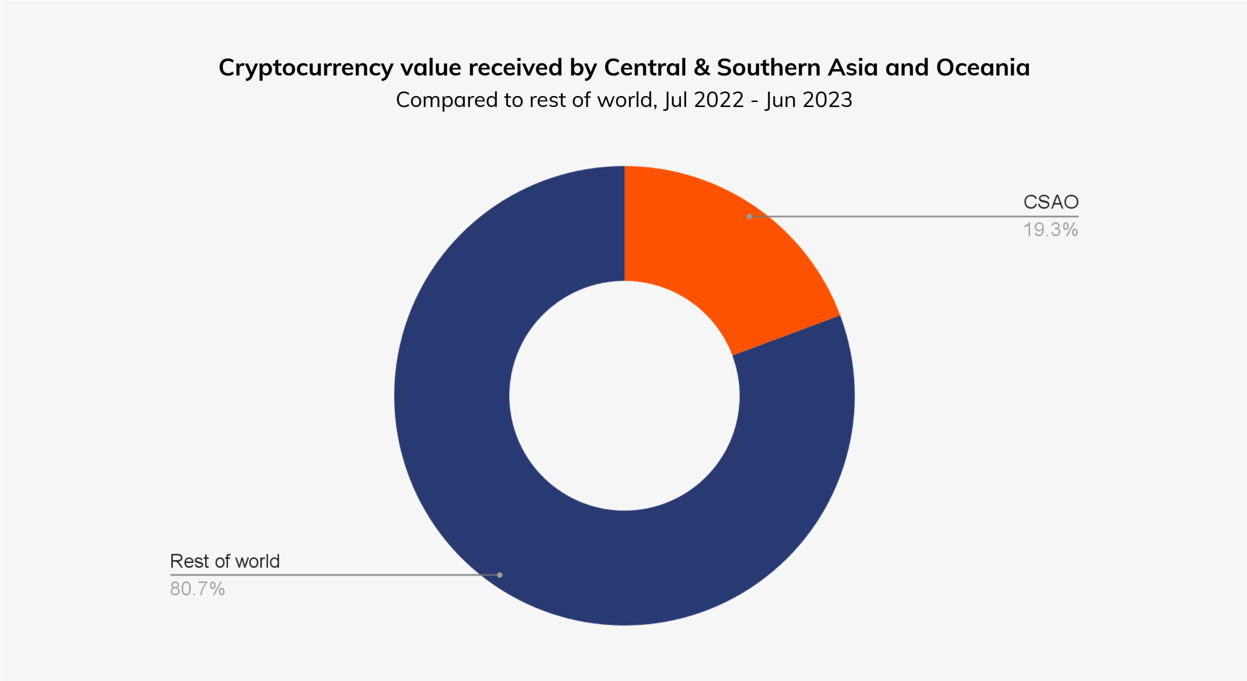
Despite the war's effects, we observed trends in the past year that indicate positive development and growth. First, we see evidence that Russia has less access to international cryptocurrency platforms, which could impact its ability to continue funding the war. Next, the war is causing Ukrainians to become more quickly integrated with the EU, which recently passed the most comprehensive crypto legislation to date. Retail usage grew in spite of global market crises, and in many countries where raw transaction volume has decreased, the number of transfers has stayed steady or increased, indicating that the technology is still providing value to users. DeFi usage also increased in the region as a whole. Whenever the effects of the Russia-Ukraine War diminish, we hope to see more crypto businesses moving back to Ukraine, as well as continual developments in crypto regulation, both of which will continue growing crypto adoption in Eastern Europe.

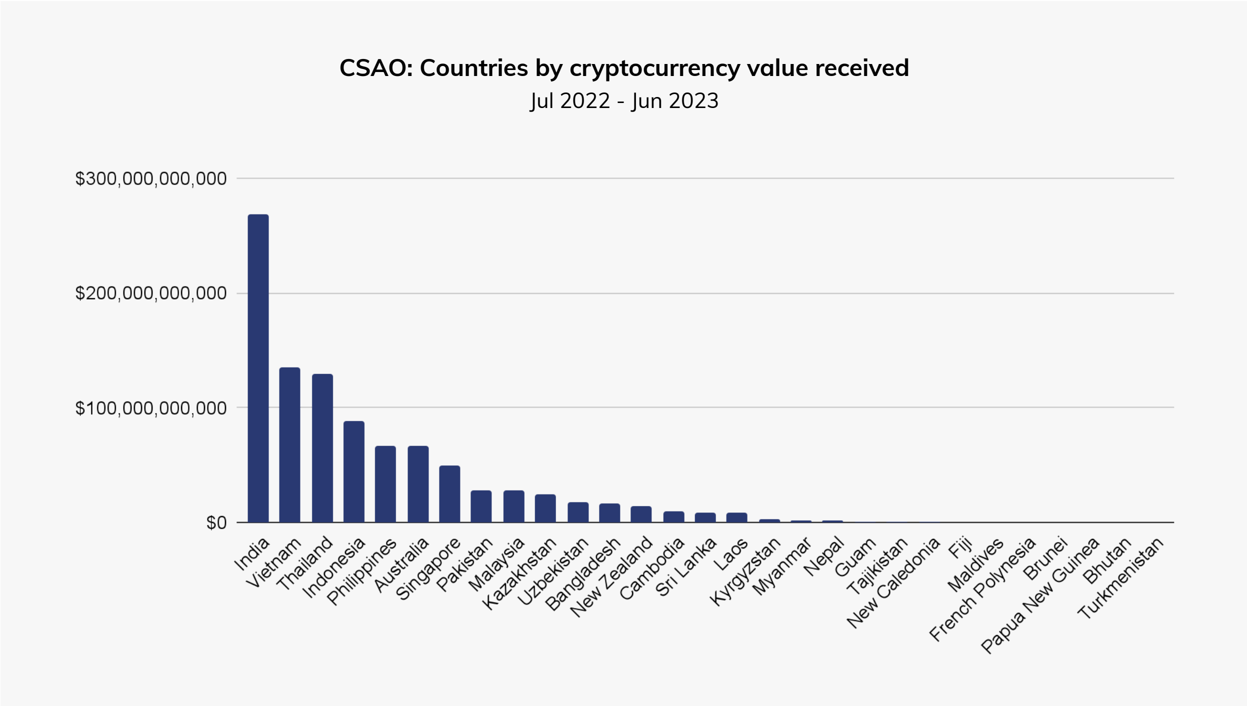
Central & Southern Asia and Oceania

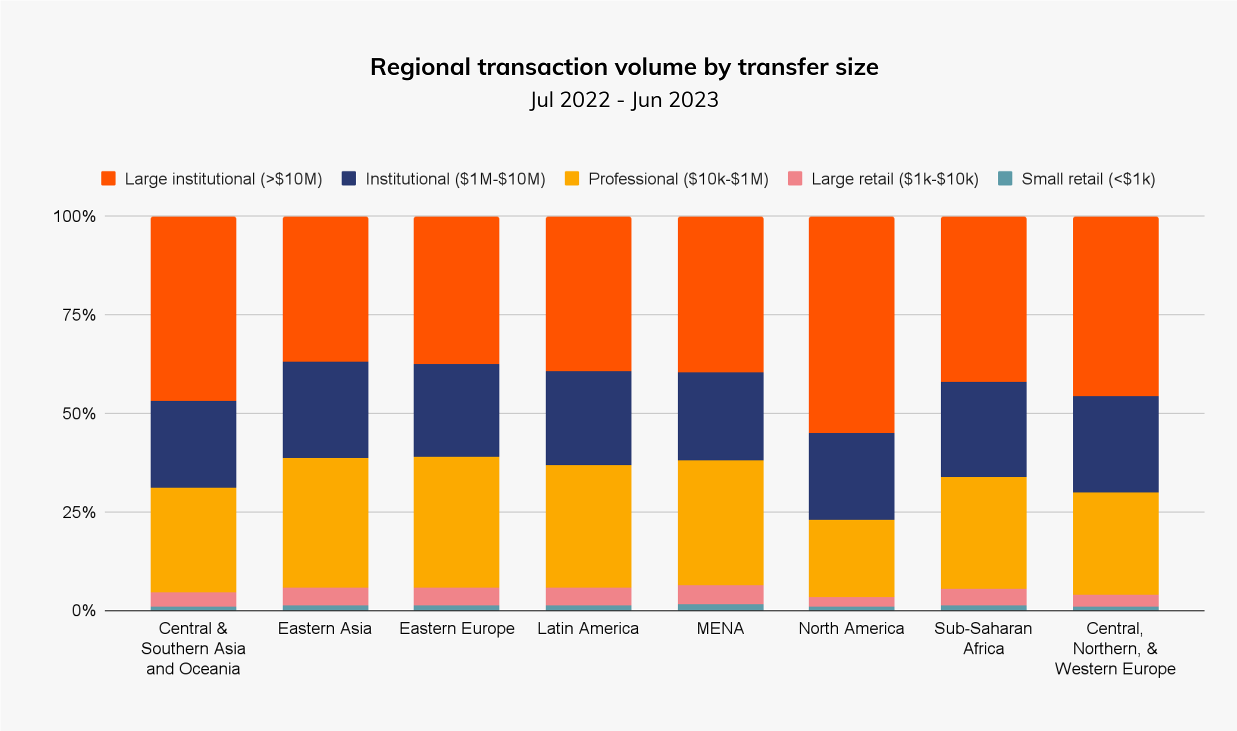


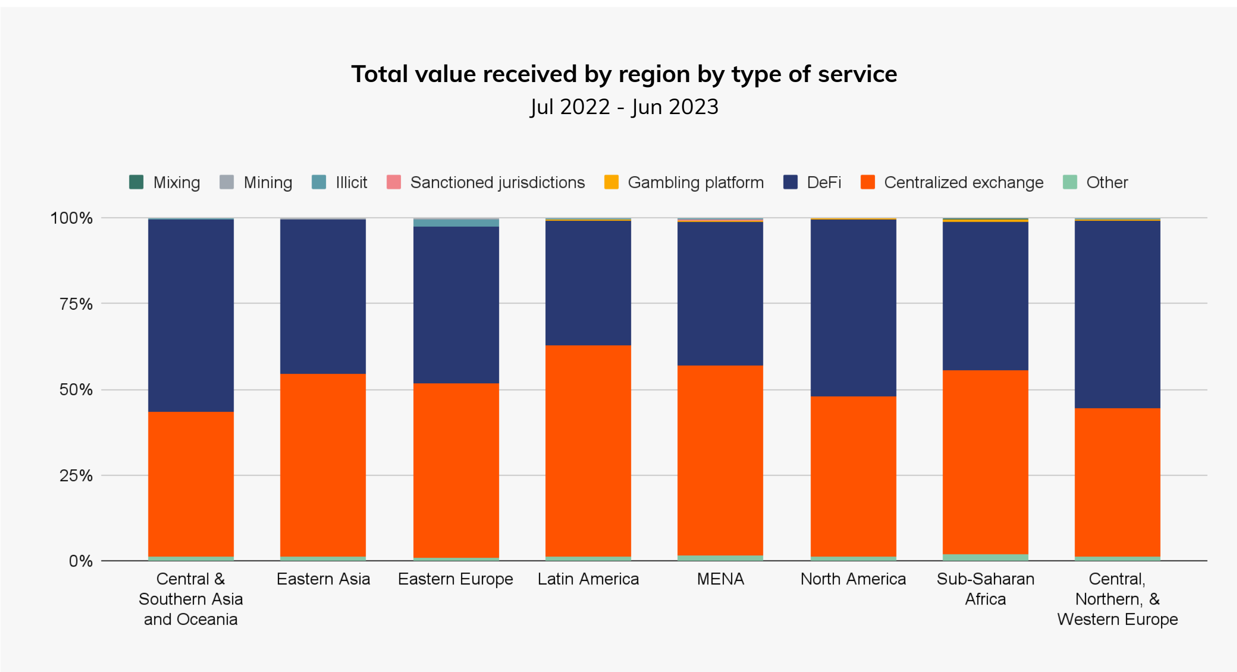
CRYPTOCURRENCY ACTIVITY SUMMARY

Central & Southern Asia and Oceania



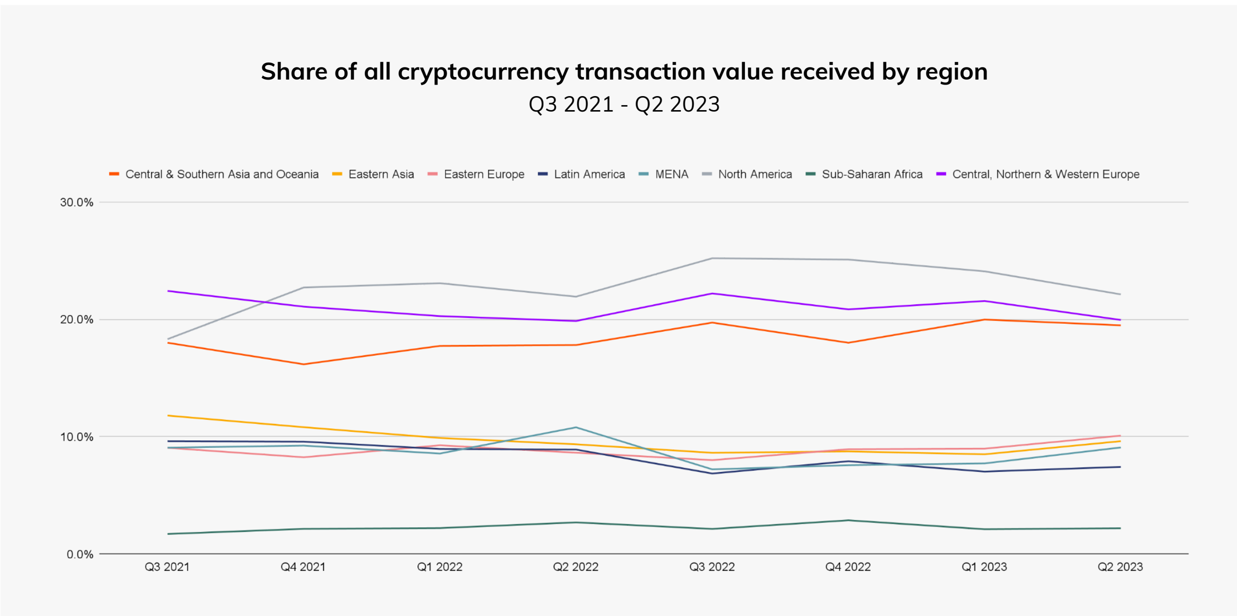



Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe


Total value received by region by type of service
Jul 2022 - Jun 2023
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
Other
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

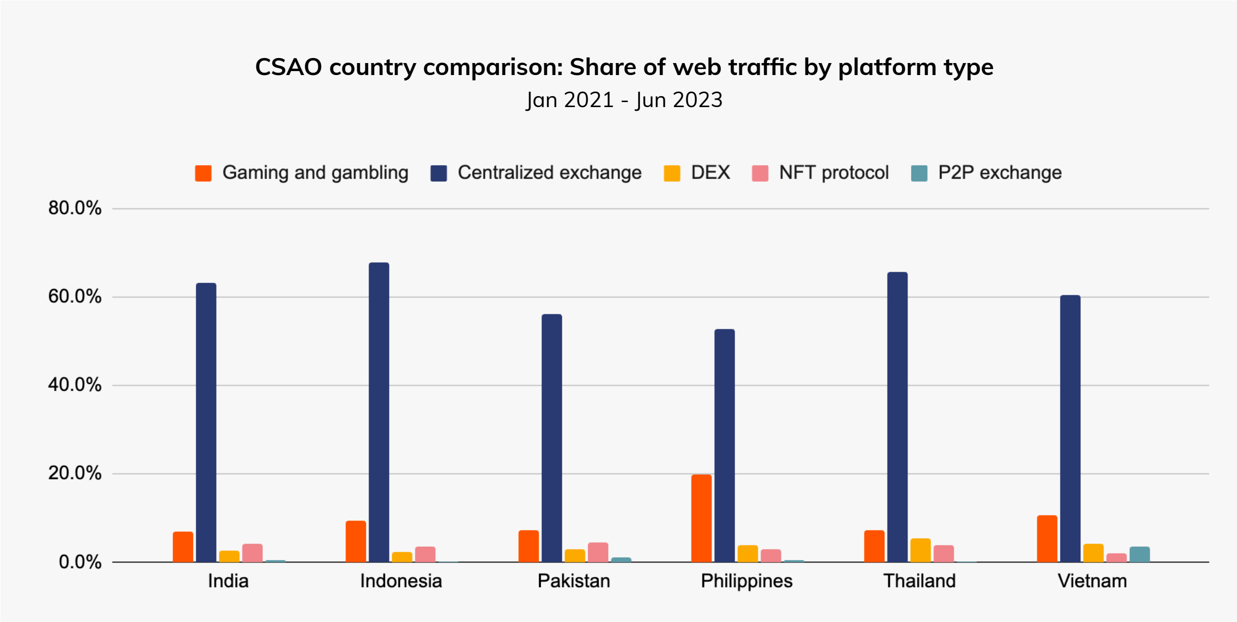
Is Central & Southern Asia the Future of Crypto? Here's What Drives Crypto Usage in the Region Leading the Way in Grassroots Adoption.

Central & Southern Asia and Oceania (CSAO) hosts what may be the world's most dynamic and fascinating cryptocurrency market. Measured in raw transaction volume, CSAO is the third-largest crypto market we study, barely trailing North America and Central, Northern & Western Europe (CNWE), accounting for just under 20% of global activity.



However, raw transaction volume doesn't tell the full story. When we account for purchasing power and population to measure grassroots adoption, CSAO dominates. We see this in our Global Crypto Adoption Index, where six of the top ten countries are located in the region: India (1), Vietnam (3), the Philippines (6), Indonesia (7), Pakistan (8), and Thailand (10). In addition, the last year has seen DeFi take on a heightened role in CSAO, accounting for an estimated 55.8% of regional transaction volume between July 2022 and June 2023, compared to 35.2% in the previous year-long period. Institutional adoption in the region also appears to have picked up, with 68.8% of total transaction volume coming in transfers valued at $1 million or more, compared to 57.6% in the preceding time period.

Crucially though, CSAO is not a monolith when it comes to cryptocurrency adoption. Different factors are driving adoption in different CSAO countries, which leads to different rates of usage for different types of cryptocurrency services. We can see this on the graph below, which shows the breakdown of web traffic to different types of cryptocurrency platforms for the top CSAO countries on the adoption index.



Centralized exchanges take up the majority of web traffic in all of these countries, as is the case around the world. But we see major differences elsewhere. For instance, the Philippines has a huge share of its crypto-related web traffic going to gaming and gambling platforms at 19.9% — Vietnam is next at just 10.8%. Meanwhile, countries like Pakistan and Vietnam see a higher share of activity happening on P2P exchanges, which are more commonly used in emerging markets or in countries with stricter capital controls.

Below, we'll explore two CSAO countries with different adoption drivers — the Philippines and Pakistan — and examine how those differences result in different usage patterns. We'll then take a look at some of the latest trends in India, the country leading the world in grassroots crypto adoption.

The Axie Infinity craze kicked off crypto adoption in the Philippines, but what comes next?

Crypto enthusiasts have long touted the $217 billion video game industry as one where cryptocurrency can make a positive impact, such as by enabling players to earn, buy, and sell in-game items. We've already seen some ambitious projects start to tackle this problem with varying degrees of success, and no country has embraced those projects like the Philippines, with play-to-earn game Axie Infinity in particular capturing the nation's attention. To learn more, we spoke to Donald Lim, an advertising and marketing veteran in the Philippines whose work has spanned several industries, and who has now entered the world of cryptocurrency, becoming the first ever president of the Blockchain Council of the Philippines and principal organizer of Philippine Blockchain Week.

"I think Axie Infinity was the moment crypto really arrived in the Philippines," said Lim. While the game was most popular amongst the younger generation, Lim saw people from all walks of life playing. "You'd get into a pedicab and see that the driver had his phone mounted at the top of the windshield playing Axie — there were so many stories like that." Indeed, the Philippines accounted for the biggest share of total Axie

Infinity web traffic at 28.3%, and on-chain data shows that the country saw increases in cryptocurrency transaction volume coinciding with Axie's growth in summer of 2021.

What made the Philippines so receptive to a play-to-earn game like Axie Infinity? Lim has several reasons. For one, the Philippines has a young, tech-savvy population that had already embraced digital wallets for fiat such as GCash. At the time Axie Infinity launched and began gaining steam, the world was in the midst of the COVID pandemic, with many stuck at home and out of work — Axie provided entertainment and a way to earn extra cash. It also gave people a social outlet. "Filipinos are used to putting in the effort to connect online and through social media, because as a nation of many small islands, we're naturally disconnected. We're also the world's biggest exporter of human capital, and Filipinos abroad want to connect with people at home," Lim explained. According to him, the Philippines' heavy social media usage made it easier for the game to go viral and reach users through tactics like influencer marketing.

Axie Infinity has since seen large decreases in both overall usage and in its token price, and many in both the Philippines and elsewhere who have abandoned the game are no better off financially than they were before. But the game's success set the stage for further crypto adoption, as the many Filipinos who played now have functioning wallets that can be used for other purposes.

Lim believes the best way to convert that initial momentum into beneficial crypto adoption is for regulators and large web2 companies to step up. "Crypto adoption can't only be bottom up. The government needs to set rules, and the biggest companies need to incorporate cryptocurrency into their offerings." Already, there's been positive momentum on both fronts. The Philippines government has designated a special economic zone in the Bataan region where cryptocurrency companies who set up shop can get tax benefits and operate in a regulatory sandbox designed to nurture innovation. On the private sector side, Philippines Airlines recently launched a utility-driven NFT collection that gives users access to special perks, while Filipino financial services firm Cebuana Lhuillier has announced an integration with the Stellar blockchain to offer faster, cheaper remittances — crucial for a country that receives as much money from abroad as the Philippines does.

Lim is confident that the Philippines has what it takes to be a leader in cryptocurrency. “We can become the blockchain capital of Asia. Look at the developer talent, look at all of the online groups devoted to trading and NFTs — it’s just a matter of time.”

In Pakistan, necessity drives adoption of crypto — especially stablecoins

Despite lower overall transaction volumes, Pakistan is a world leader in grassroots cryptocurrency adoption, not far behind the Philippines. But adoption patterns in the two countries are quite different. While social connection and speculation have driven many Filipinos to enter crypto via play-to-earn gaming, a need for wealth preservation in the face of high inflation and currency devaluation appears to be the reason many Pakistanis have turned to crypto. We spoke with Zeeshan Ahmed, Country General Manager for Pakistan of popular crypto exchange Rain, to learn more. Rain operates in several countries in the region and, while it currently conducts no commercial activity in Pakistan given crypto trading is currently banned in the country by law, is working to one day obtain a regulatory license.

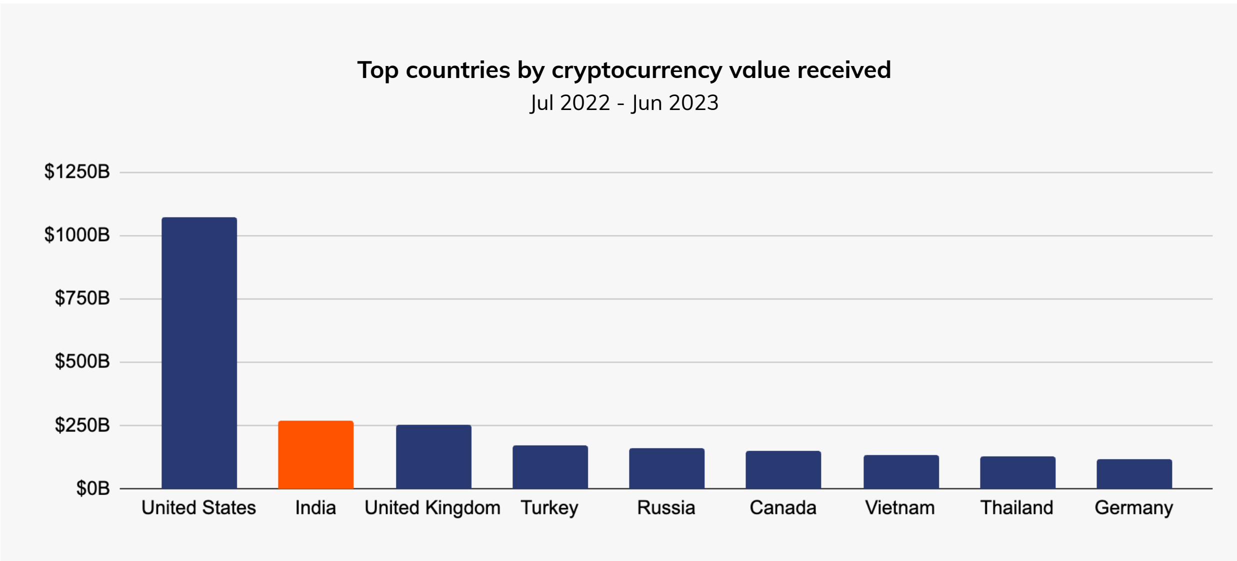
When we asked Ahmed what drives Pakistani crypto adoption, he replied with some sobering statistics. “Five years ago, Pakistan’s inflation was 10.6%. Right now, it’s officially reported as 29.4%, but in reality much higher. The major spike came in the last 16 months, as the rupee’s value has dropped from 178 PKR per U.S. dollar in January of 2022 to 320 PKR as of August.” Unfortunately, challenging economic conditions in Pakistan have meant savings can be eroded rapidly. And on top of that, there aren't many good options for ordinary people to invest in the current environment. “The equities market and stock exchange have tanked. And any gains you achieve can be wiped out by inflation,” Ahmed explained. Pakistani citizens are also barred from holding physical foreign currency — it has to be deposited in a bank. For many, this makes crypto, and in particular stablecoins, a necessity. “It’s the only option we have to hedge.”

It’s also important to note that on-chain data can’t tell the full story on crypto adoption for a country like Pakistan. Much of the country’s transaction volume, and in particular the acquisition of stablecoins, takes place through informal peer-to-peer markets, and can’t easily be identified on-chain. As such, it’s difficult to know exactly how many individuals are holding or acquiring cryptocurrency at any given time. Further, experts speculate that businesses in Pakistan use stablecoins like USDT to import goods from abroad and hedge against inflation and currency devaluation, which is difficult to confirm.

While cryptocurrency trading is formally banned in Pakistan, Ahmed believes that a clear regulatory framework could help make the crypto market more productive for Pakistani citizens. Though the official stance has not changed, Ahmed says he is sensing some recent progress on this front. “Eight months ago, our regulators didn’t even want to talk about crypto. But recently in July of this year, we submitted to them a white paper on how crypto could be regulated, and they seem to be moving forward.” Future regulation could, for instance, allow Pakistanis to move funds to exchanges from a bank account, which would make it much easier and more cost-effective to acquire the digital assets they need, setting the stage for further growth.

India remains a top crypto market despite difficulties around tax laws

While other markets in the region are dynamic and can help us understand the unique drivers of crypto adoption, the biggest CSAO cryptocurrency market by far is India. India leads the world in grassroots adoption as measured by our Global Crypto Adoption Index, but perhaps even more impressively has become the second-largest crypto market in the world by raw estimated transaction volume, beating out several wealthier nations.



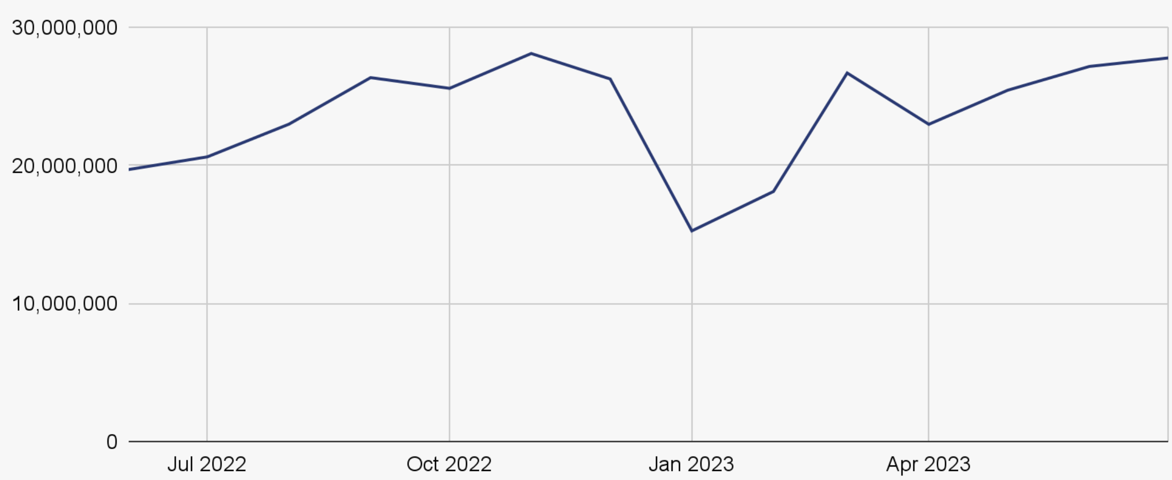
India's cryptocurrency usage spans several different forms of activity, as the country ranks in the top ten in usage for cryptocurrency services in a varied set of categories.

Crypto platform type	India's rank in usage by estimated transaction volume
DEX	2
Centralized exchange	4
Lending protocol	4
Token smart contract	4
NFT protocol	9

Perhaps most impressive of all is that India's emergence as a top cryptocurrency market comes in spite of a regulatory and tax environment that can be challenging for the industry to navigate. Within the last year, regulatory agencies have provided more clarity on many issues, for instance formally decreeing that its money laundering rules will apply to cryptocurrency transactions. However, India taxes cryptocurrency activity at a much higher rate than most other countries, with a 30% tax on gains — a rate unique to crypto and higher than the country's tax rate on other investments such as equities — and a 1% tax on all transactions, also known as a tax deducted at source (TDS), meaning that crypto platforms must deduct the amount from the user's balance at the time of the trade in order for the trade to be completed.

Recent reporting further confirmed to us by industry players in the region indicates that uneven implementation of TDS may be making it more difficult for homegrown Indian exchanges to compete. While every exchange operating in the country is required to collect TDS taxes from Indian users, many international exchanges aren't doing so effectively, which may be drawing Indian users to them as opposed to exchanges focused primarily on India. We can see some evidence of this on the chart below, which shows that web traffic from India to international exchanges spiked immediately when TDS was implemented in July 2022.

Web traffic from India to international exchanges
Jun 2022 - Jul 2023



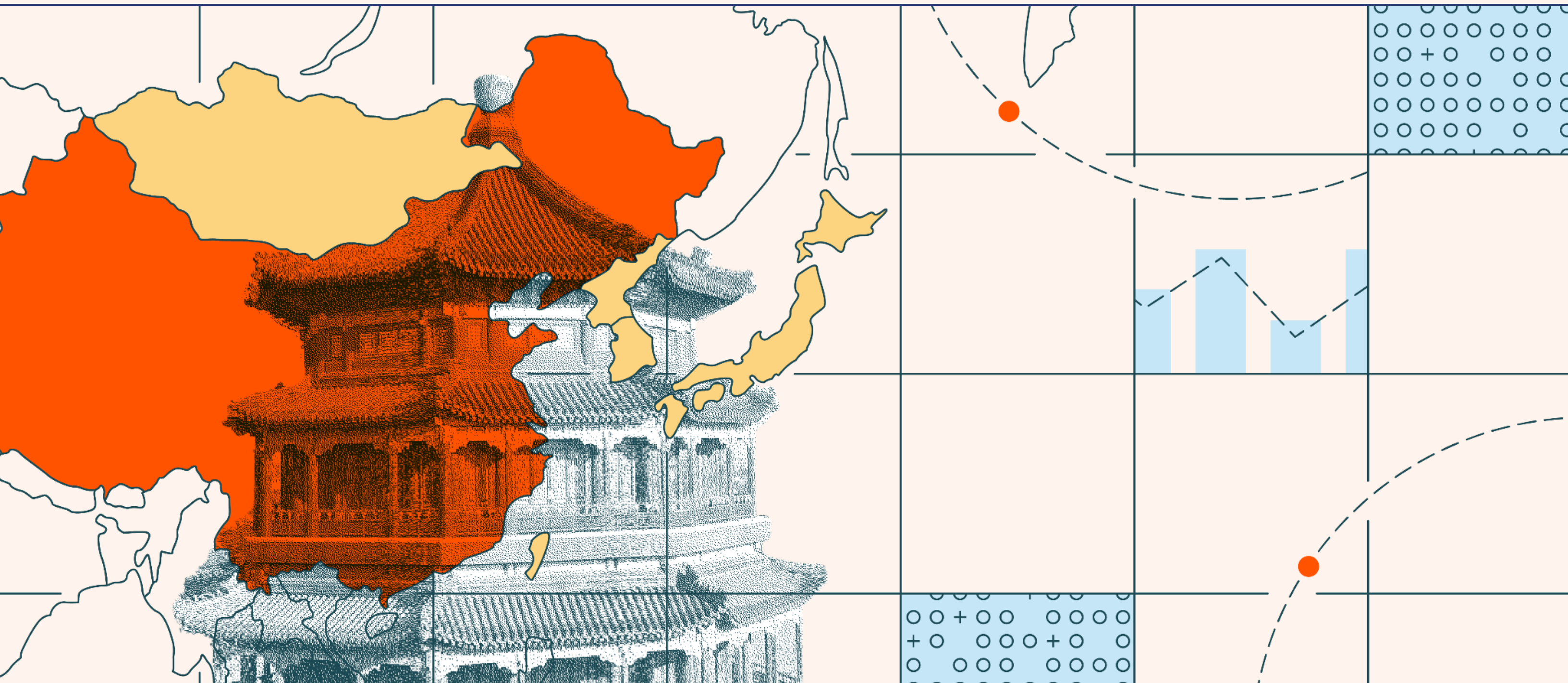
The trend underlines the importance of strictly enforcing local rules like TDS for all exchanges operating in a given country. Doing otherwise can create an environment of regulatory arbitrage that hurts the country's native crypto industry.

However, while those issues are important, they don't appear to have dampened India's enormous demand for cryptocurrency — as long as that demand is there, crypto will always have a place in the world's second-largest country.

CSAO shows that cryptocurrency can be adapted to local circumstances

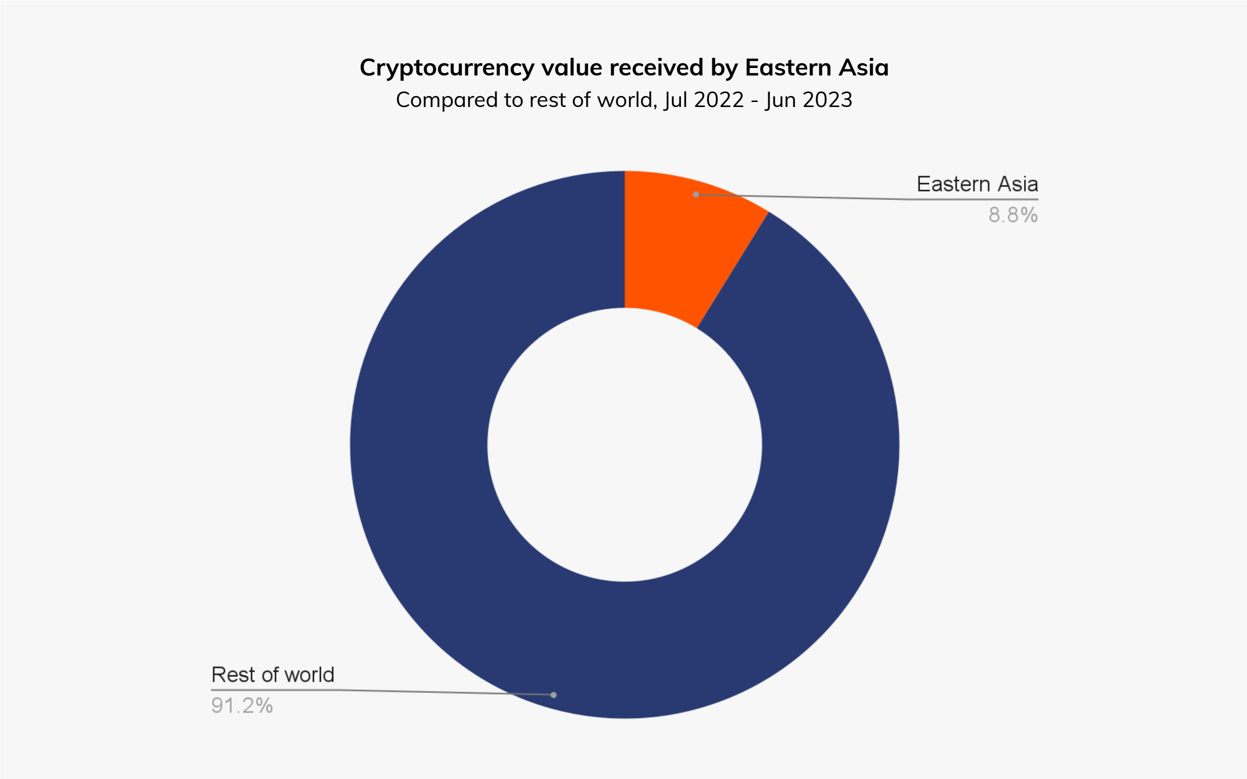
No region provides more reason to believe that cryptocurrency is the future than CSAO, and it's not just because so many CSAO countries rank highly for grassroots adoption. It's because those countries have wide-ranging, unique economic needs, and different crypto platforms and assets have arisen to meet them in each case. In the Philippines, where many want to speculate on new assets, make extra cash, and connect digitally with others, play-to-earn games were able to gain an enormous foothold. The games act as an entry point into the wider digital asset economy, and now thousands of Filipinos have crypto wallets they can use for other purposes. In Pakistan, where the economic situation is more dire — consider Pakistan's $5,680 PPP per capita versus the Philippines' $9,210 on top of the currency devaluation we described — stablecoins are providing economic relief. If Pakistan's government passes reasonable crypto regulations, its existing users can be the foundation of a thriving market, as we've seen play out in India. CSAO shows that regardless of a country's circumstances, cryptocurrency has a valuable role to play.

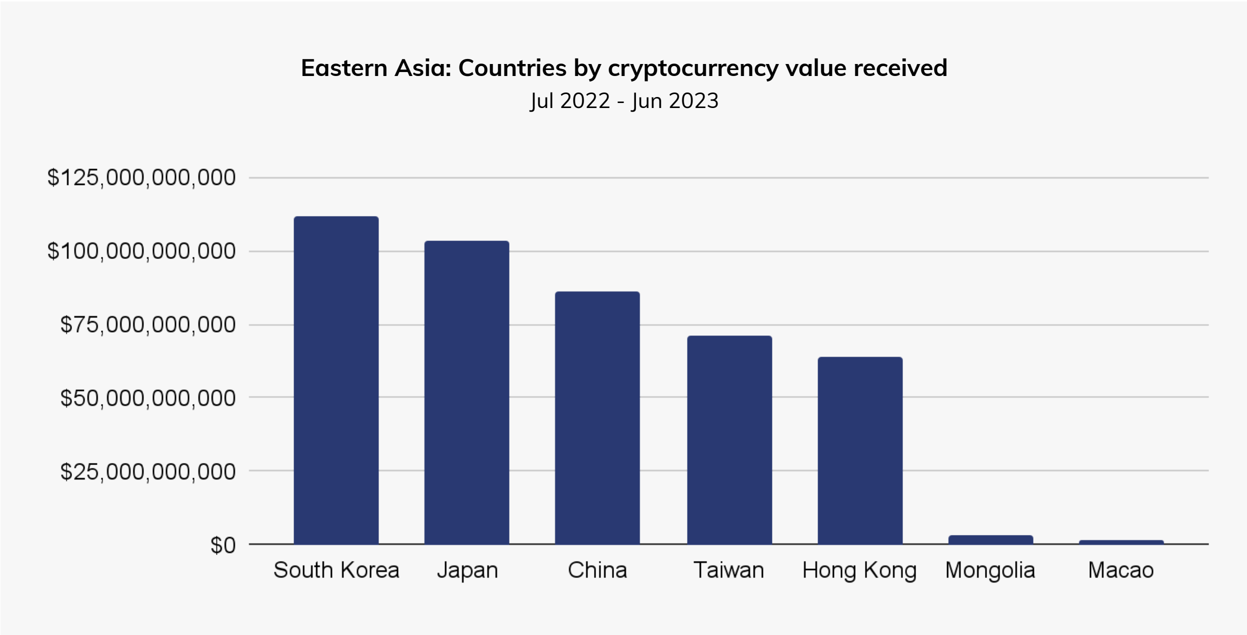
Eastern Asia



CRYPTOCURRENCY ACTIVITY SUMMARY

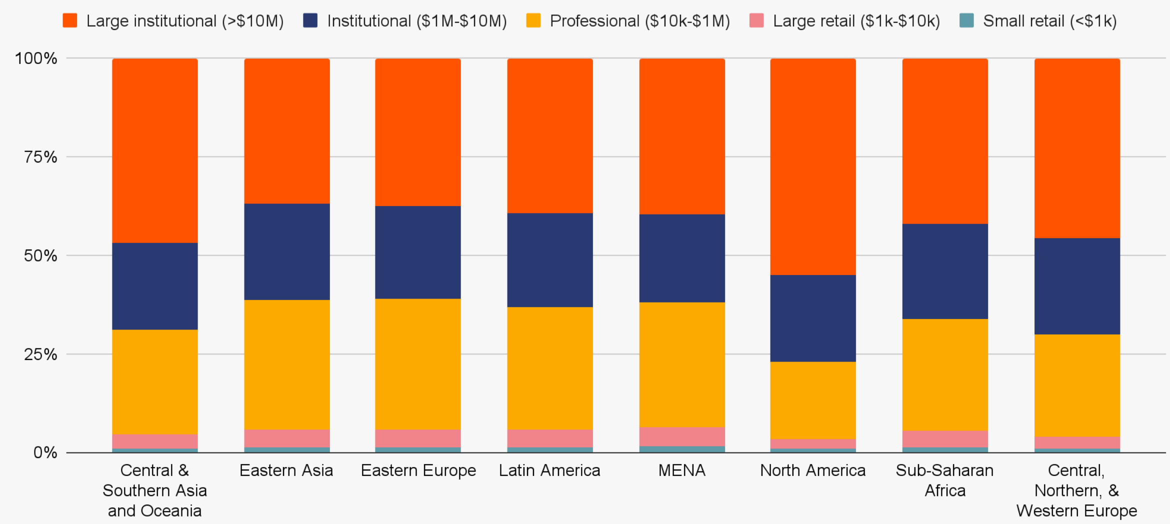
Eastern Asia





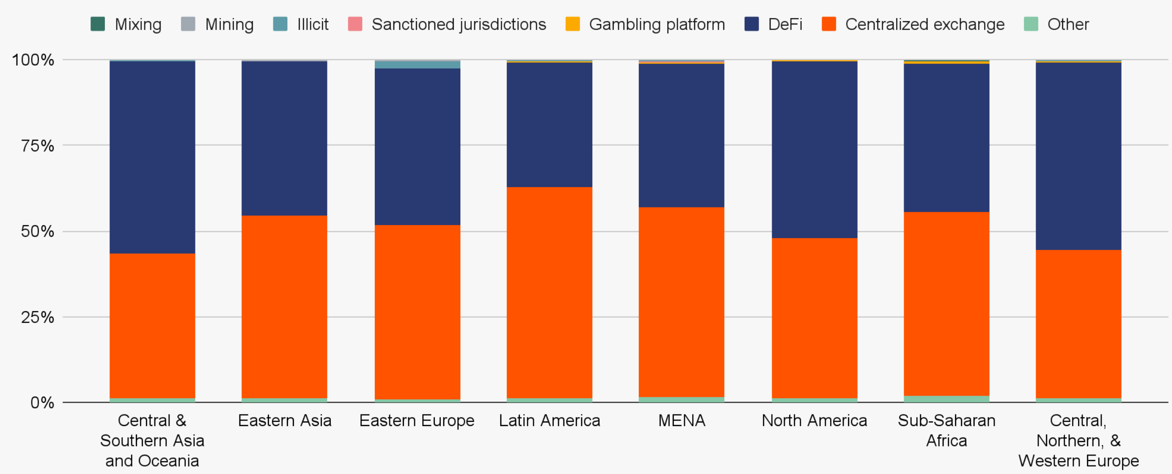
Regional transaction volume by transfer size

Jul 2022 - Jun 2023



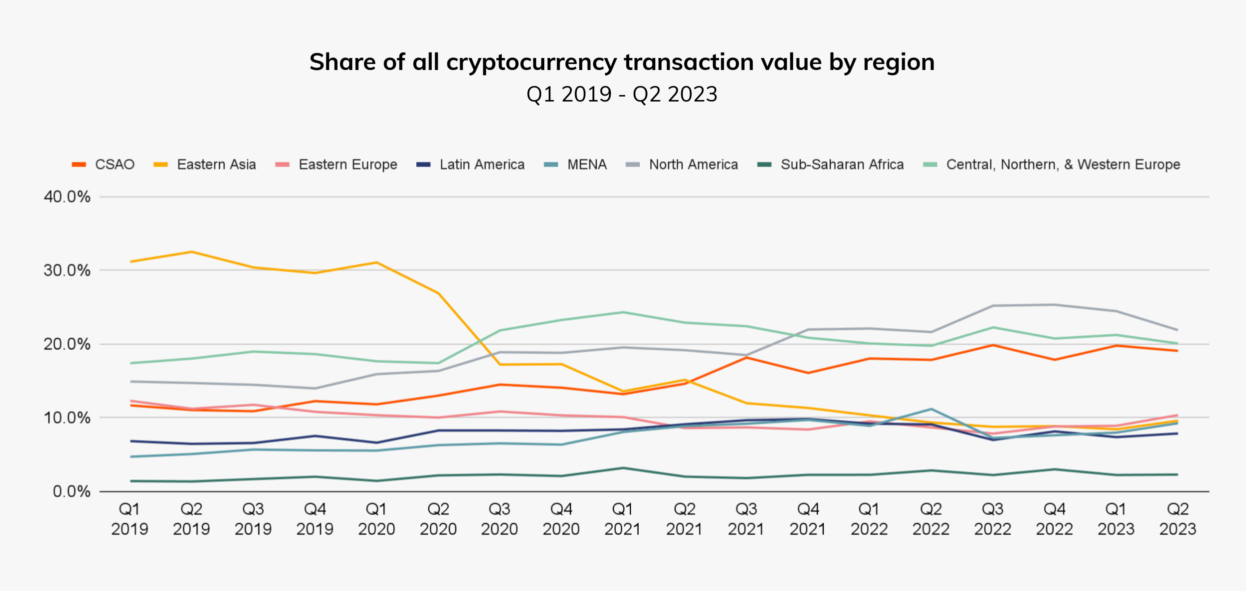
Total value received by region by type of service

Jul 2022 - Jun 2023



Eastern Asia: Do Recent Hong Kong Developments Signal More to Come for China and Region at Large?

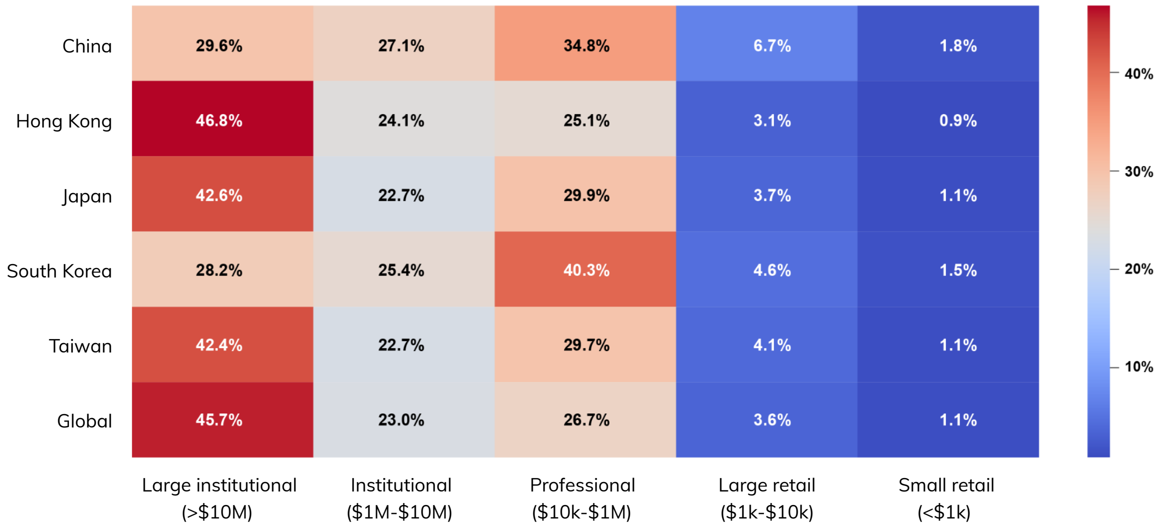
Eastern Asia is the fifth most active crypto market we study, accounting for 8.8% of global crypto activity between July 2022 and June 2023. Its decline over the last few years has been notable – as recently as 2020, Eastern Asia was crypto's top market by transaction volume, largely powered by China's huge trading activity and mining sector. But while still substantial, crypto activity in the region at large and China specifically has declined in the last two years, due perhaps in part to a series of bans on virtually all things crypto by the Chinese government.



However, a potential tailwind for East Asia comes from Hong Kong, where several crypto initiatives and industry-friendly regulations launched over the past year have fostered bubbling optimism. The increasingly close relationship between China and Hong Kong leads some to speculate that Hong Kong's growing status as a crypto hub may signal that the Chinese government is reversing course on digital assets, or at least becoming more open to crypto initiatives. As we see above, Hong Kong is an extremely active crypto market by raw transaction volume, with an estimated $64.0 billion in crypto received between July 2022 and June 2023. That's not far behind China's $86.4 billion received during the same time period, despite Hong Kong having a population 0.5% the size of mainland China's.

Much of this is driven by Hong Kong's highly active OTC market. OTCs, or "over-the-counter" trade desks, typically facilitate large transfers for institutional investors and high net worth individuals, which are conducted privately so as to not affect asset prices or broadcast traders' activity. Hong Kong's skew toward OTC activity manifests in the city's breakdown of transaction volume by transaction size, which we show on the chart below alongside that of its regional neighbors and the overall global average.

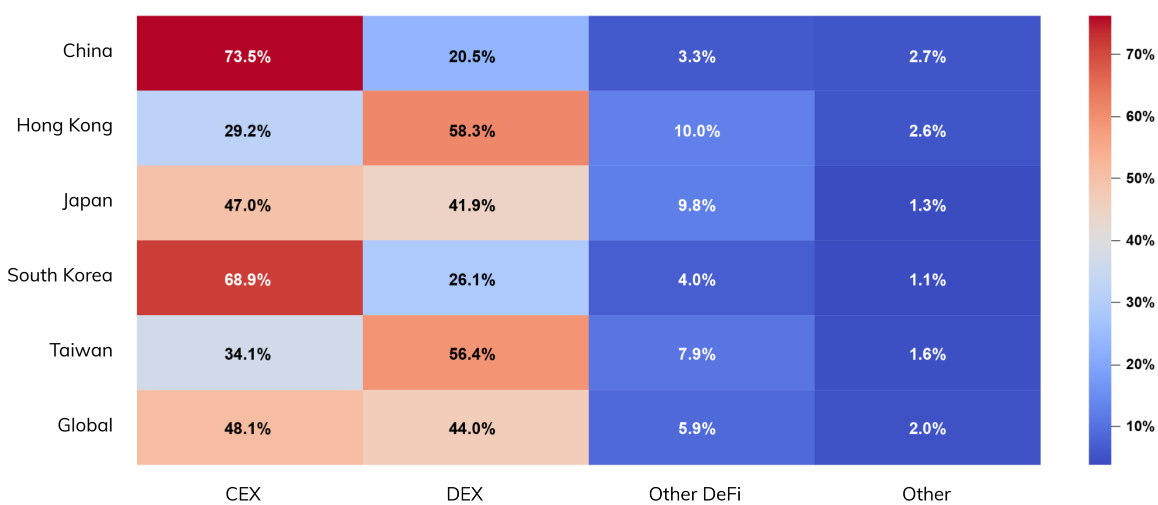
Share of Eastern Asia country transaction volume by transfer size vs. Global average
Jul 2022 - Jun 2023



Hong Kong sees a larger share of transaction volume coming in large institutional transactions of $10 million or more compared to other countries in the region — notably mainland China. On the other end of the spectrum is South Korea, which appears to be the least institutional-driven market in the region based on transaction sizes. That's likely due to local regulations that make it difficult for financial institutions to trade — South Korea requires a specific type of bank account linked to an individual in order to open a crypto exchange account, which makes it challenging for institutional players to enter the crypto market. Overall, Japan appears to be the Eastern Asia country whose retail versus institutional transaction breakdown is most in line with global averages.

Interesting regional trends emerge when we look at the breakdown of most-used crypto platform types for different Eastern Asia countries.

Share of Eastern Asia country crypto activity by platform type vs. Global average
Jul 2022 - Jun 2023



Again, Japan closely follows global markets, with most activity split close to evenly between centralized exchanges and various types of DeFi protocols. South Korea, on the other hand, sees 68.9% of transaction volume associated with centralized exchanges, and much less with DeFi protocols. One reason for this could be negative sentiment in the country related to the blowup of TerraLuna, which affected a large number of South Korean crypto users — even residents who didn't lose money likely saw the incident covered heavily in local media. In the wake of TerraLuna, South Korea also passed several new rules governing the conduct of centralized exchanges, including requirements to hold reserve funds. The new rules may have increased South Koreans' faith in centralized exchanges at a time when DeFi's reputation took a hit in the country.

China and Hong Kong also show unique breakdowns in most-used crypto platform types, though these numbers should be taken with a grain of salt given the anecdotal evidence that much crypto activity in both countries takes place through OTCs or through informal, grey market peer-to-peer businesses. We'll explore some of those dynamics more below.

What does Hong Kong's growing status as a crypto hub say about crypto's future in China?

China's relationship with cryptocurrency has been one of the most interesting and difficult-to-follow stories in the industry over the last few years. As recently as 2020, the country was home to one of the most active crypto markets in the world, and led all countries in Bitcoin mining by a wide margin. However, China's government eventually began to crack down on cryptocurrency, with the state-run People's Bank of China declaring virtually all crypto activity illegal in 2021.

Recent developments, however, have created speculation that the Chinese government may be warming to cryptocurrency and that Hong Kong may be a testing ground for these efforts. Hong Kong functions as a Special Administrative Region of China, meaning it has autonomy over many aspects of policy, including regulation of cryptocurrency. Hong Kong is also already home to a large, OTC-driven local crypto market, as discussed above. Over the last year though, Hong Kong has implemented rules allowing retail crypto trading within a regulated environment. It has also seen Chinese state-owned businesses launch crypto-focused investment funds and collaborate with local crypto businesses.

What is driving crypto adoption in Hong Kong, and what could this imply about the future of crypto in China as a whole? We spoke to founders of two different Hong Kong-based OTC firms to learn more: Merton Lam of CryptoHK, and Dave Chapman of OSL Digital Securities.

Both acknowledged that a diverse array of use cases power crypto adoption in China and Hong Kong. Merton told us a few that he's seen in his time running CryptoHK. "Different customers have different means. We work with many investment banks, private equity firms, and high net worth individuals. For them, cryptocurrency is part of their investment portfolio. They mostly want Bitcoin and Ether, though some have shown interest in smaller altcoins recently, which is interesting." Chapman echoed this sentiment, telling us that many institutional investors are bullish on crypto. "The future of digital assets is no longer questionable; it's widely acknowledged that digital assets are not going away," he said. "Whether or not traditional finance is ready to accept digital assets as a new asset class, the reality is that many institutional investors are now keen to explore and develop their own digital asset strategies."

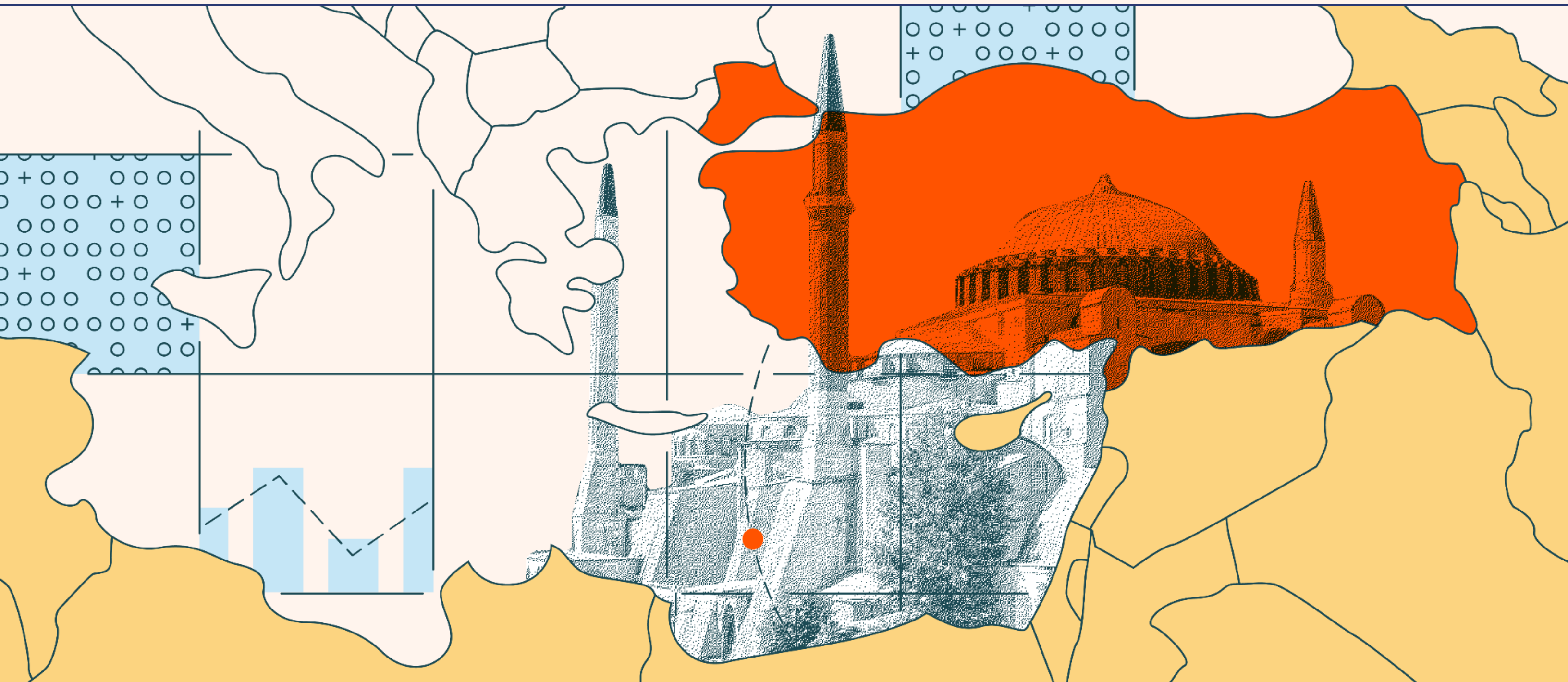
Chapman indicated that similar motivations, such as potential for high returns, drive retail adoption in the region. Merton echoed this, but also pointed to the many foreign users CryptoHK caters to, many of whom are interested in using crypto to move portions of their wealth out of their local currency and banking systems, especially in countries with unstable economies or strict capital controls. “Anecdotally, I hear from other crypto exchanges that many Russians and Ukrainians are coming to Hong Kong to get their money to safety using crypto,” said Merton. “These aren’t multimillionaires either — ordinary people are doing this too.” Moving capital across borders may also be driving some of the interest from mainland Chinese users too. A recent Financial Times article on the Hong Kong OTC market described how some users from mainland China use these services to move money to other countries or to on-ramp from fiat to cryptocurrency, both of which are difficult to do in China.

Similarly, Merton pointed to international business payments as another important use case in the region, as crypto payments can offer several advantages over bank transfers. “It’s much easier for many businesses to, say, pay a supplier via stablecoin transfer than through banks. It can take as long as three days for a SWIFT transaction to settle, and payments can be especially difficult when dealing with counterparties in developing countries such as in South Asia and Africa.” The international payments use case also brings to mind another element worth noting: China has sought to undermine the dominance of the U.S. dollar in international trade, particularly given the power it gives the U.S. to sanction entities around the world, and that goal is one reason for projects such as China’s CBDC, the digital yuan. Given cryptocurrency’s value as a tool for international trade generally, even apart from CBDCs, it’s possible that goal undergirds any potential openness to blockchain technology we’re seeing from the Chinese government.

That of course leads to the question on everyone’s mind: Does Hong Kong’s embrace of cryptocurrency over the last year suggest that the Chinese government is softening on the technology? Chapman is in a unique position to shed light on the question, as OSL recently became one of the first businesses to receive a license under Hong Kong’s new regulatory regime for crypto exchanges. “The promotion of Hong Kong as a potential crypto hub is not necessarily indicative of the Chinese government's stance on crypto,” he told us. “However, we are seeing a number of Chinese state-backed entities indirectly supporting Hong Kong's web3 ventures, and this could be viewed as an exploratory approach to understanding digital assets without loosening mainland policies.” In other words, while these developments strengthen Hong Kong’s chances to become a global leader in the regulated digital asset market, it’s too early to say what they mean for China as a whole.

Overall, Hong Kong’s unique crypto market enables a variety of use cases, not just for local users, but for foreigners as well. Moreover, while nothing is for certain, the apparent tacit approval of Hong Kong’s new crypto initiatives could possibly signal that the Chinese government’s stance on cryptocurrency is evolving. That may mean interesting developments are in store for what was once one of the most important countries in the crypto landscape.

Middle East & North Africa

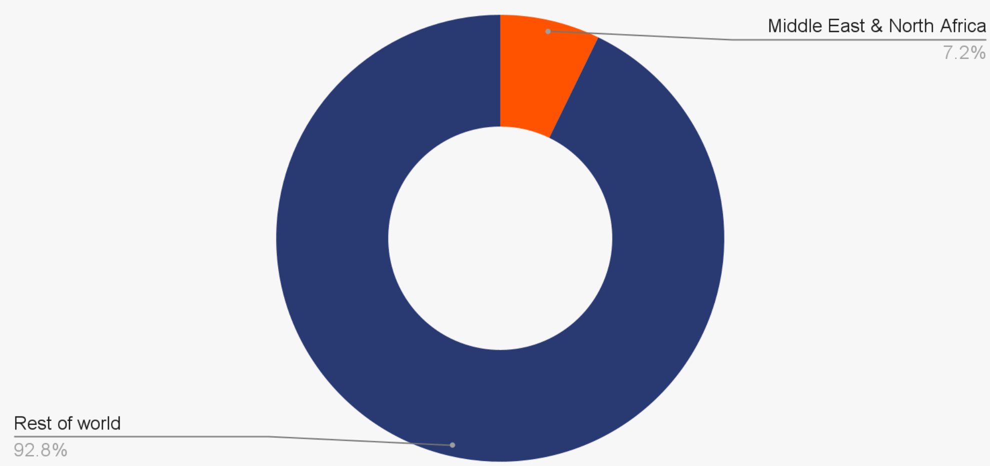


CRYPTOCURRENCY ACTIVITY SUMMARY

Middle East & North Africa

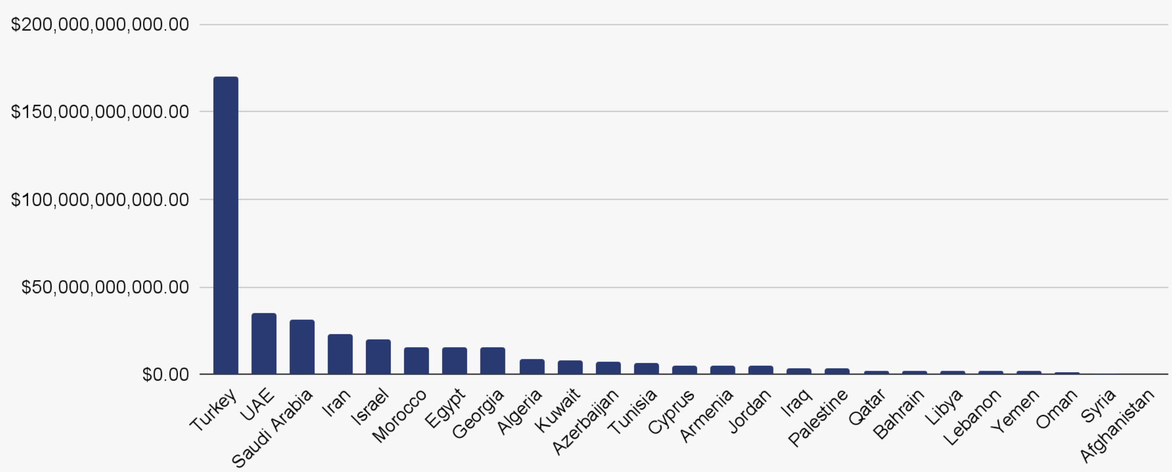
Cryptocurrency value received by Middle East & North Africa

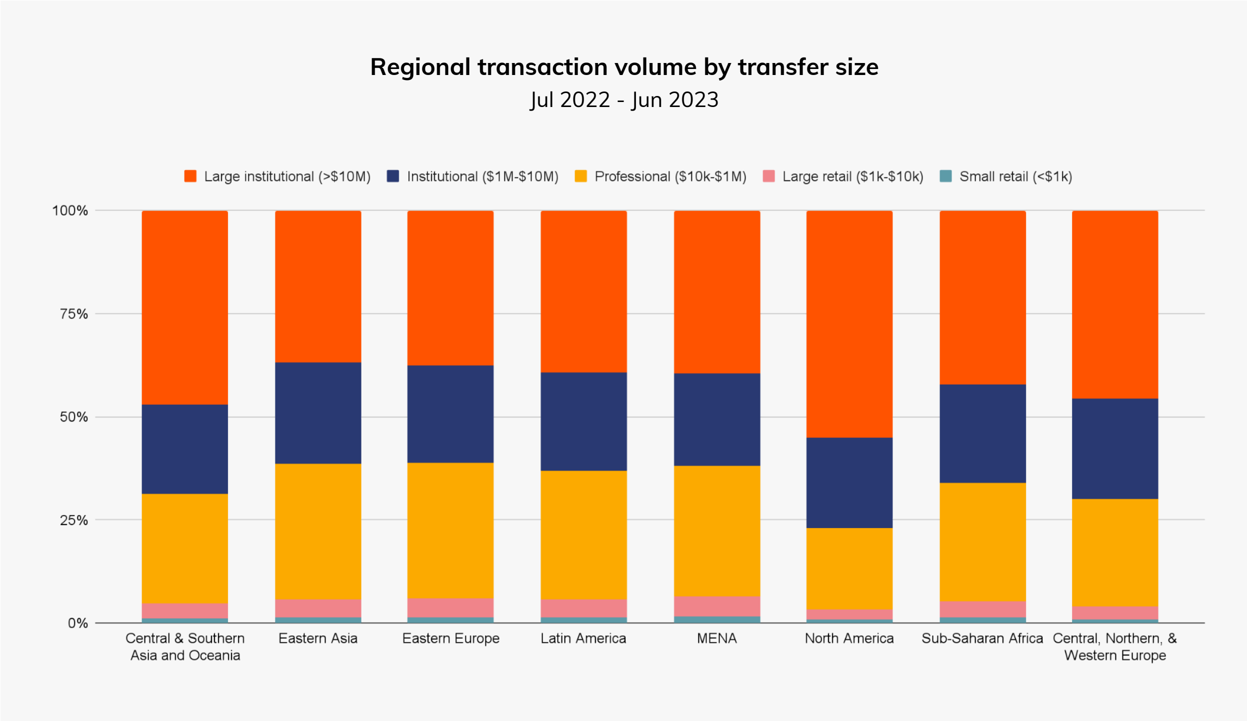
Compared to rest of world, Jul 2022 - Jun 2023

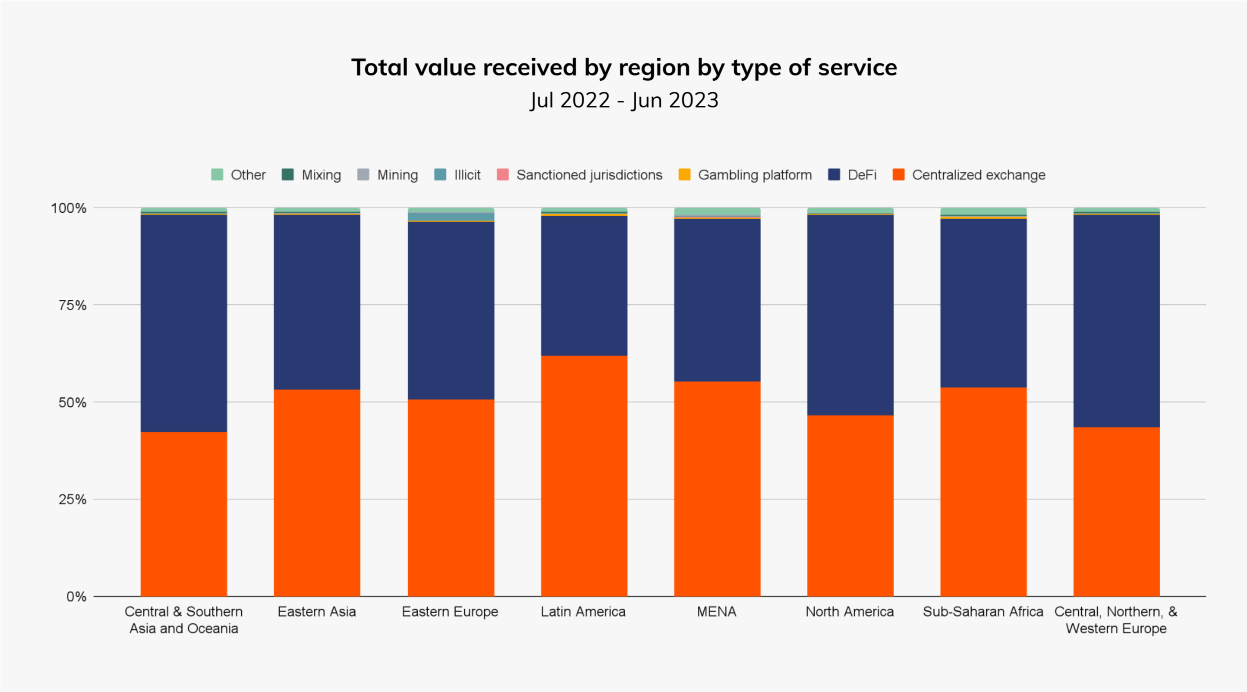


Middle East & North Africa: Countries by cryptocurrency value received

Jun 2022 - Jul 2023

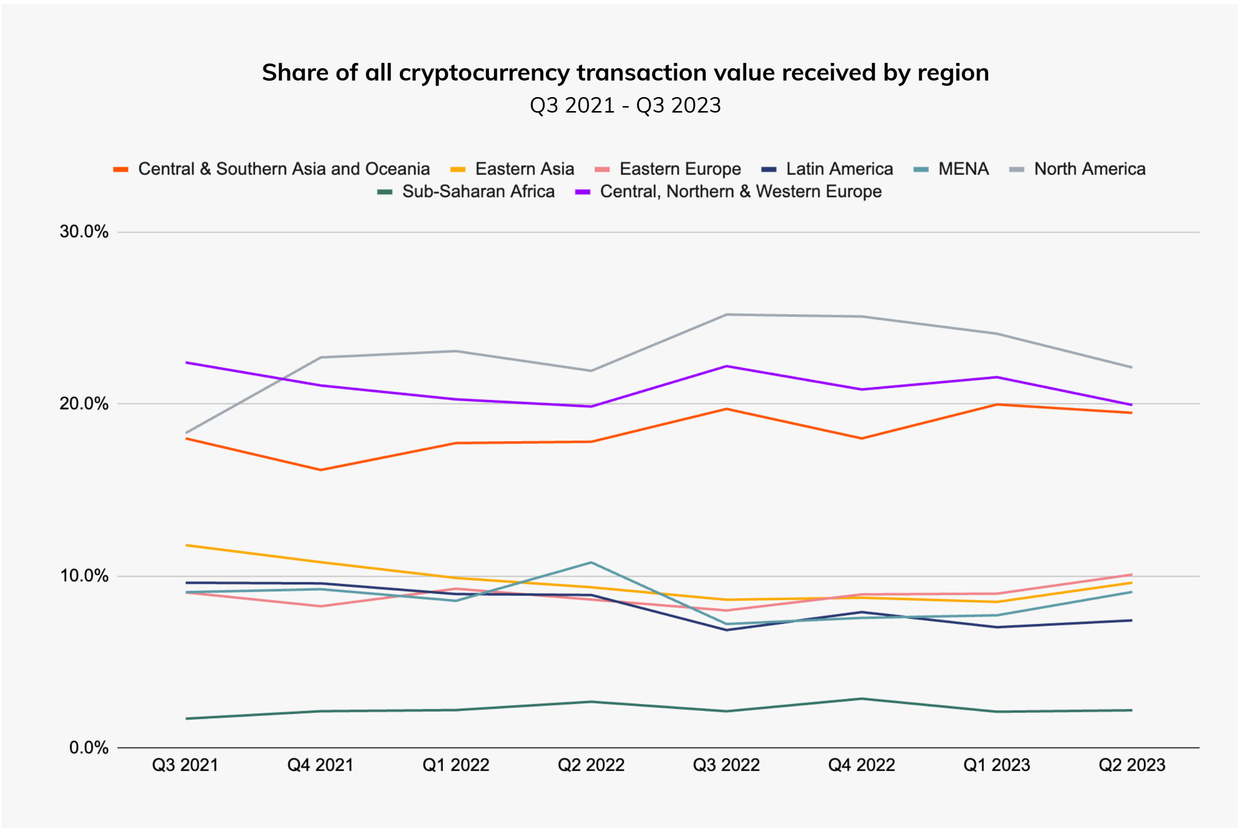



Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe


Total value received by region by type of service
Jul 2022 - Jun 2023
Other
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

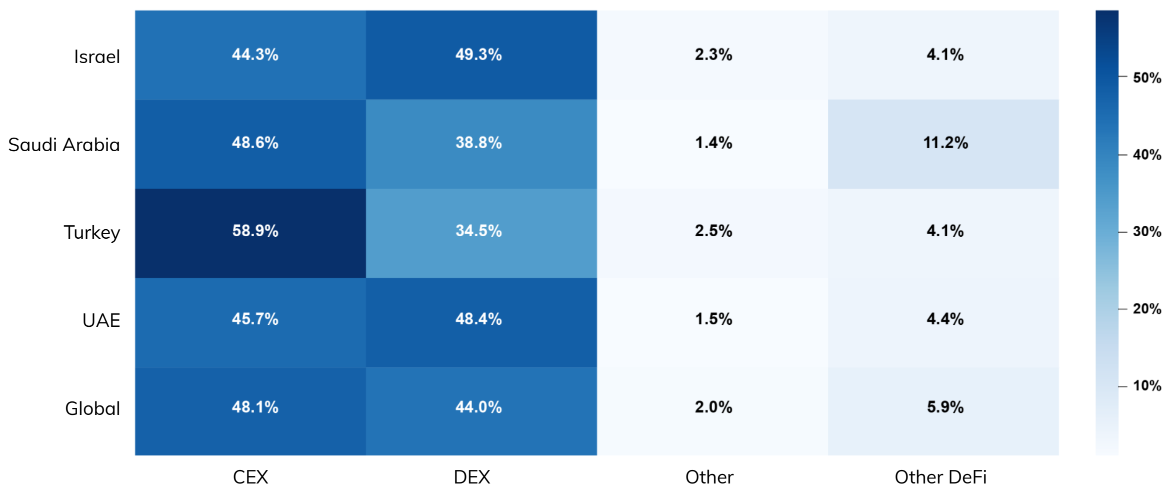
Crypto Takes Hold as UAE Leads the Way in Promoting Regulatory Clarity

The Middle East & North Africa (MENA) has the sixth-largest crypto economy of any region we study this year, with an estimated $389.8 billion in on-chain value received between July 2022 and June 2023. This represents nearly 7.2% of global transaction volume during the period studied. MENA is also home to three of the top 30 countries in this year's index: Turkey (12), Morocco (20), and Iran (28).



Similar to other regions, we see significant differences in crypto adoption and usage between countries within the region. Check out the heat map below, which compares some of MENA's top crypto economies' activity by platform type over the last year.

Share of MENA country crypto activity by platform type vs. Global activity share
July 2022 - June 2023



The biggest standout is the UAE, which sees a much higher share of crypto activity taking place on DeFi protocols compared to its regional neighbors, apart from Israel. One reason for this may be that the UAE has turned itself into a world crypto hub by passing innovation-friendly regulatory frameworks that allow groundbreaking crypto platforms to develop with oversight that keeps consumers safe. Those regulatory frameworks have attracted many crypto entrepreneurs and enthusiasts to the region, which may be why DeFi — which represents the cutting edge of blockchain technology in many ways — sees more usage there. Turkey, on the other hand, puts more of its activity into centralized exchanges, as its users appear more focused on acquiring crypto to counteract currency devaluation. We'll explore those trends and more below.

The United Arab Emirates (UAE): How forward-looking regulators are shaping a global crypto hub

The UAE has a history of attracting top financiers, young tech entrepreneurs, and cutting edge companies from across the globe due to its uniquely innovation-friendly regulatory focus. The UAE is also ahead of the curve when it comes to adopting advanced technologies to help make businesses more efficient and improve quality of life for its citizens. The same holds true for blockchain technology.

UAE regulators were early to cryptocurrency, with Dubai, the country's most populous city, first launching a blockchain strategy in 2016. Since then, UAE regulators have remained at the forefront of the industry. In 2018, the Abu Dhabi Global Market (ADGM) created the world's first regulatory framework for

cryptocurrency, with the goal of fostering innovation while protecting consumers, and ensuring the UAE is positioned as a leader in the digital economy. Dubai established its own Virtual Asset Regulatory Authority (VARA) in 2022, which works towards similar goals. The UAE passed further crypto regulations at the federal level earlier this year, which allows local regulators like VARA flexibility in how they regulate and maintains economic free zones to attract crypto innovation.
We spoke with Akos Erzse to learn more about how regulators like VARA are fostering a dynamic environment for crypto businesses to operate in the UAE. Erzse is Senior Manager for Public Policy at BitOasis, a popular cryptocurrency trading platform headquartered in Dubai. He praised a comprehensive regulatory framework VARA released in February 2023. "VARA has brought new momentum for forward-looking regulatory clarity in the region, which has attracted a high number of crypto players to the UAE," said Erzse. According to him, what sets VARA's framework apart from others around the world is the specificity with which it approaches different kinds of virtual asset services and activities. "There are distinct rulebooks for staking, broker-dealers, advisory services, custodians — this makes it easier for businesses to understand what the specific regulatory requirements are for providing certain services." VARA has worked to ensure the rules are responsive to industry needs — Erzse cites as an example a recent amendment VARA made to its custody rulebook, which now allows custodians to stake assets from custody. "This responsiveness allows us and businesses like ours to innovate at pace."

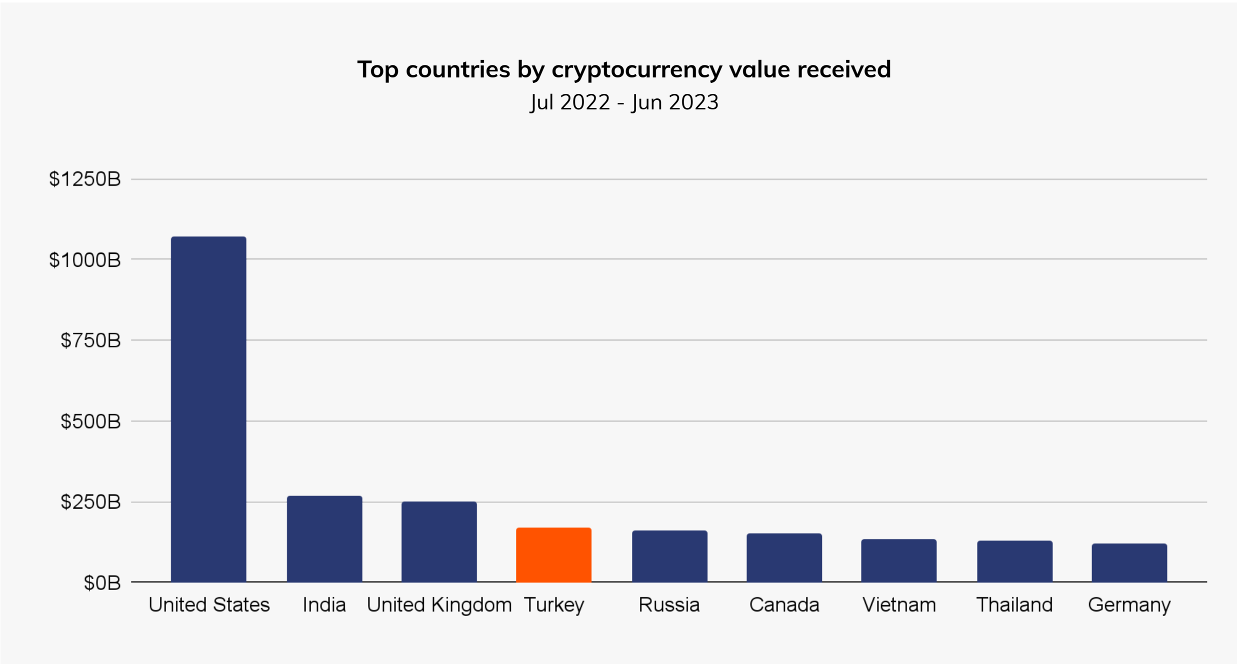
Erzse says the UAE's unique and dynamically-evolving frameworks are especially important at a time when regulatory momentum has picked up in other parts of the world. "There's an ongoing regulatory competition between markets that are looking to establish themselves as crypto hubs, and smaller markets are moving quickly." The UAE's regulatory approach has allowed it to attract global businesses and crypto entrepreneurs, and along with them high-net-worth individuals looking to invest in virtual assets through regulated platforms.

Asked about what the future could hold for cryptocurrency in the UAE, Erzse expressed excitement about innovative new crypto business models such as asset tokenization. TOKO, a crypto platform focused on tokenization, has recently acquired a license from VARA to provide such services from the Emirate.

He also cited remittances as an important use case for crypto to address in the UAE and the broader region. "We're a remittance hub, and people are definitely already using crypto to send money home, but it will be exciting to see which dedicated products emerge, leveraging the regulatory frameworks available." Indeed, the fact that India, the Philippines, and Pakistan were all ranked among the top 10 in our Adoption Index also bodes well for the UAE. These nationalities represent a significant portion of the UAE's expat population, and the surging popularity among people in these nations is likely to correlate with increased crypto adoption in the UAE as well. Sure enough, VARA has a rulebook available that addresses the remittance use case.

Rising inflation in Turkey fuels crypto adoption

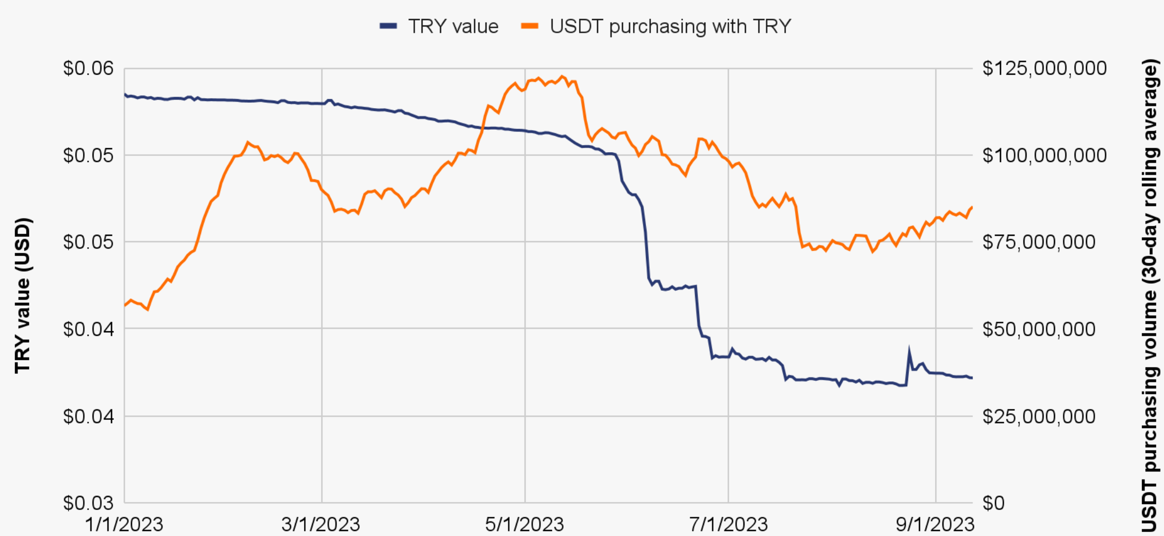
In addition to ranking 12th on our Global Crypto Adoption Index, Turkey is also fourth worldwide in raw crypto transaction volume, receiving approximately $170 billion over the last year. That puts it behind only the United States, India, and the United Kingdom.



Yasin Oral, CEO and founder of Turkish cryptocurrency exchange Paribu, noted that Turkey's relatively high level of crypto adoption is not entirely surprising for several reasons, such as the country's recent macroeconomic climate and its young population's interest in innovation and technology. He explained, "A difficult year was left behind globally with the impact of tightening monetary policies, which also affected Turkey. Under such conditions, individuals tend to seek alternatives, like cryptocurrencies, to store value, diversify their investment portfolios, and engage with new asset classes. In relation to this behavior, as each market cycle attracts new investors and adopters, more individuals and entities learn about the promises and benefits of blockchain, which ultimately results in an increasing level of crypto adoption."

Indeed, Turkey has been facing rising inflation, which reached nearly 60.0% in August 2023. Additionally, the Turkish Lira crashed in 2021 after the central bank cut interest rates by 100 basis points. Since then, the Lira hasn't recovered — in fact, it reached record lows in mid-2023. We can see evidence of Turkish currency devaluation driving interest in crypto on the chart below, which shows the value of the Turkish lira versus USDT purchasing volume in Turkish lira across several exchanges. There was one big buying spike starting around March 30, when analysts announced that they expected the lira to fall significantly in value, regardless of who won the country's May elections, at a time when the currency was already weakening. After a sustained decrease, USDT buying picked up again in late July, soon after the lira hit a new low of under $0.04 in value and citizens awaited a central bank announcement on interest rates. Keep in mind too that our figures for UDST purchasing in lira are displayed as a 30-day average, which can add a slight delay in the pickup of new trends.

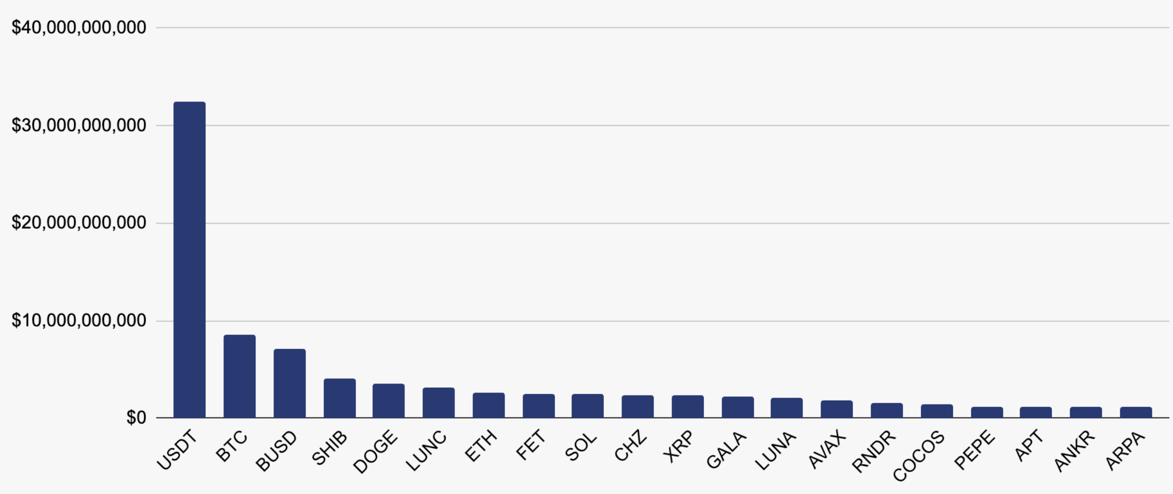
TRY value vs. USDT purchased with TRY daily
1/1/23 - 9/12/23



Sources: CryptoCompare and ExchangeRate-API

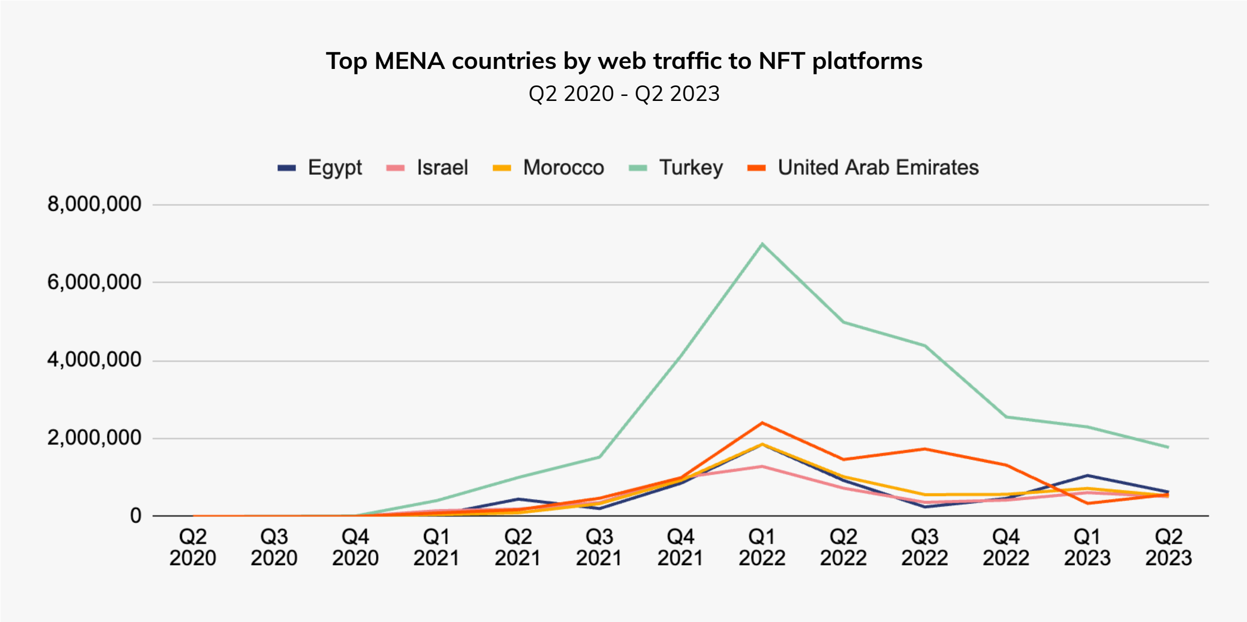
Generally speaking, we also see that USDT is the crypto asset most commonly purchased with the Lira across global exchanges.

Crypto assets purchased with Turkish Lira by total trading volume
Jul 2022 - Jun 2023



Sources: CryptoCompare

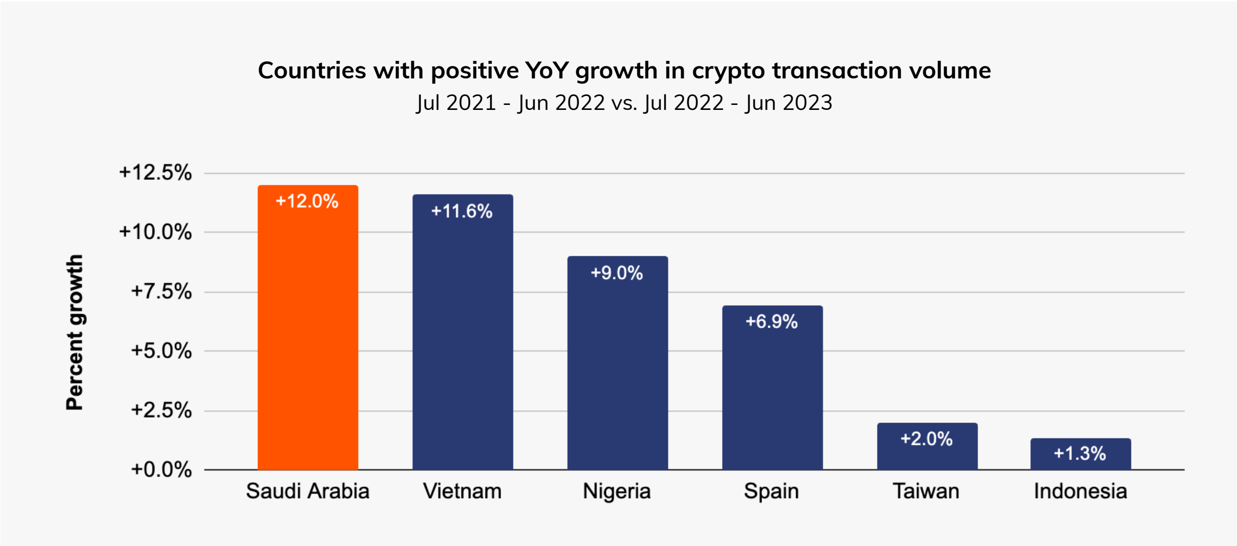
However, Turkey doesn't devote all of its crypto activity to stablecoins. A broader analysis reveals that Turkey is the top country in the region by web traffic to NFT platforms, despite the overall decline in NFT activity since mid-2022.



Artists like Refik Anadol, a Turkish-American entrepreneur who was one of the first to use artificial intelligence to create immersive artwork, helped pioneer the Turkish NFT craze. Throughout this period, local crypto platforms like Paribu attracted and supported NFT activity. Recent market turmoil has likely contributed to the waning popularity of NFTs, but Oral is confident that NFTs will play a significant role in the future. "As we see it, NFTs and utility tokens are essential to define innovative solutions in many industries, such as retail, entertainment, and art. Turkey will indeed become a significant hub for the next wave of blockchain-based solutions, and NFT technology will be a crucial component of the mix."

Saudi Arabia leads the world in year-over-year crypto transaction growth

No country saw its crypto economy grow more this past year than Saudi Arabia, with year-over-year transaction volume growth of 12.0%. In fact, Saudi Arabia is one of only six countries to see any year-over-year transaction volume growth during the time period studied.



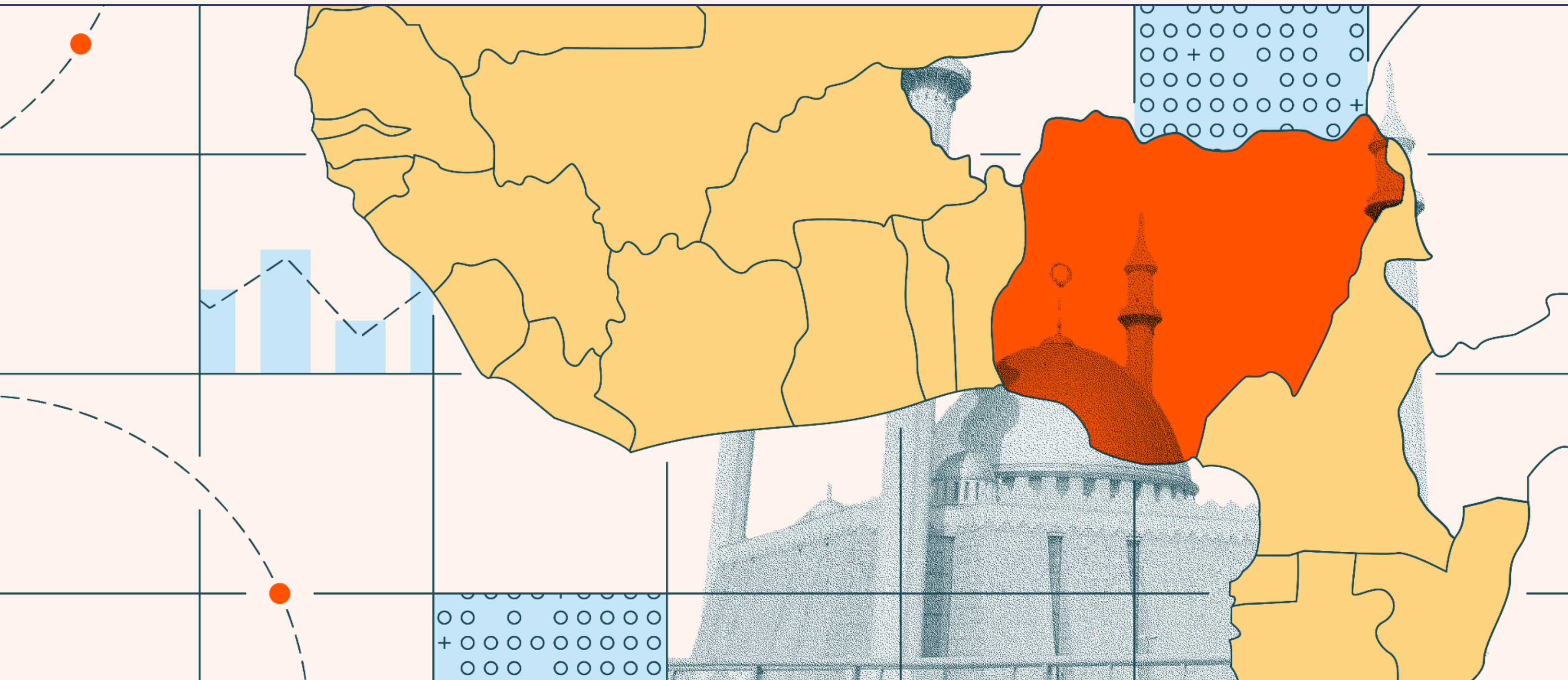
Abdulmajed Alhamzah, Country General Manager for Saudi Arabia at crypto exchange Rain, described what makes cryptocurrency attractive to Saudi users. "Retail investors are often the largest demographic turning to crypto, seeking to diversify their portfolios. Many already have investments in real estate, stocks, and other assets, and they're keen to include crypto. They recall the internet's transformative impact and are eager to engage with crypto early on, anticipating significant growth in the coming years," he elaborated. He also noted a rise in crypto adoption in the region and institutional interest, which constitutes a substantial portion of Rain's institutional clientele there. "Many of the businesses we collaborate with see long-term value in crypto. Crypto is seen as an investable asset class in a diverse portfolio for clients."

Those positive use cases, along with the growth of the crypto market generally, may prompt Saudi Arabia's government to warm up to cryptocurrency. In 2018, the Saudi government stated that the use of Bitcoin was illegal and issued warnings about potential risks associated with trading other cryptocurrencies. But the country's crypto market grew nevertheless, and in September 2022, the Saudi Central Bank hired tech entrepreneur Mohsen Al Zahrani as so-called "Crypto Chief" to lead a digital transformation in the centralized banking system. Additionally, Saudi Arabia has expressed interest in diversifying its economy by fostering Web3 and blockchain gaming projects. One such project is a partnership with The Sandbox to explore the metaverse. Abdulmajed sees this as reason for optimism. "Regulators in the region are working very hard to provide a robust regulatory framework that fuels innovation in the space but more importantly, protect customer funds, as well as safeguarding customers from potential scams."

MENA's future growth potential

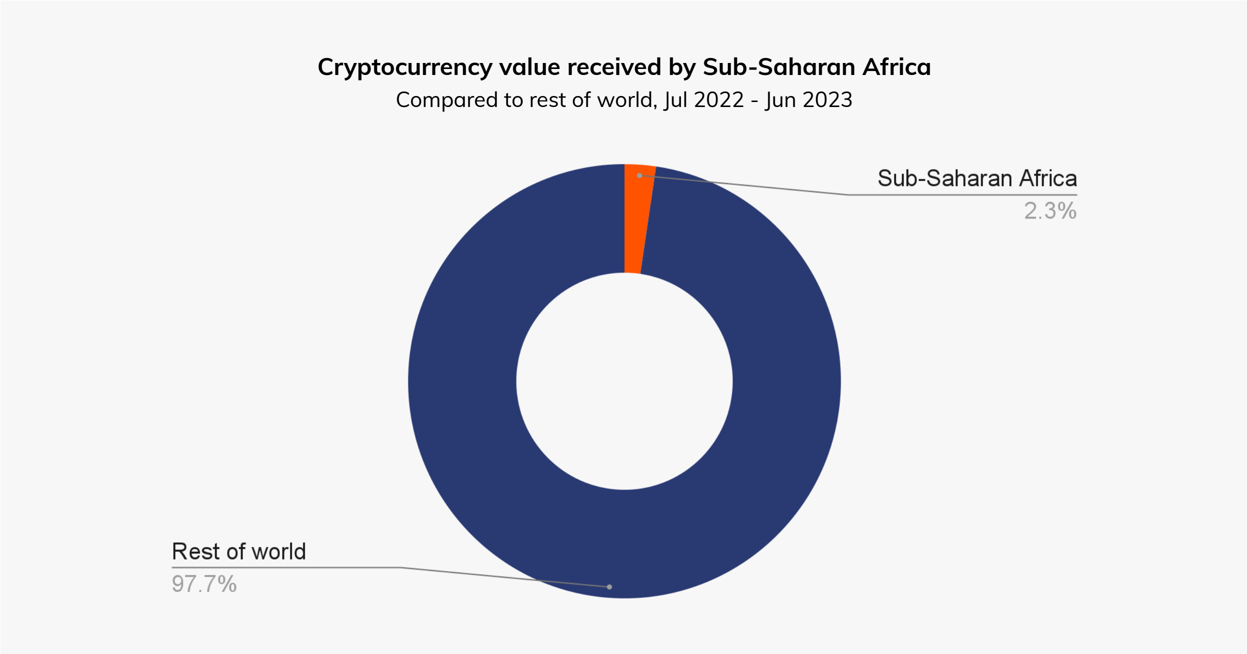
Overall, our data and interviews with MENA-based cryptocurrency companies illustrate that the region embraces crypto for a variety of reasons. In countries with unstable currency or inflation, crypto is useful to safeguard wealth, while users in more economically stable countries like the UAE may be more inclined to explore more investment-focused, cutting edge use cases. The UAE also provides a valuable example of how regulatory clarity and rules designed to allow innovation can enable countries to establish themselves as crypto hubs, bolstering the local economy.

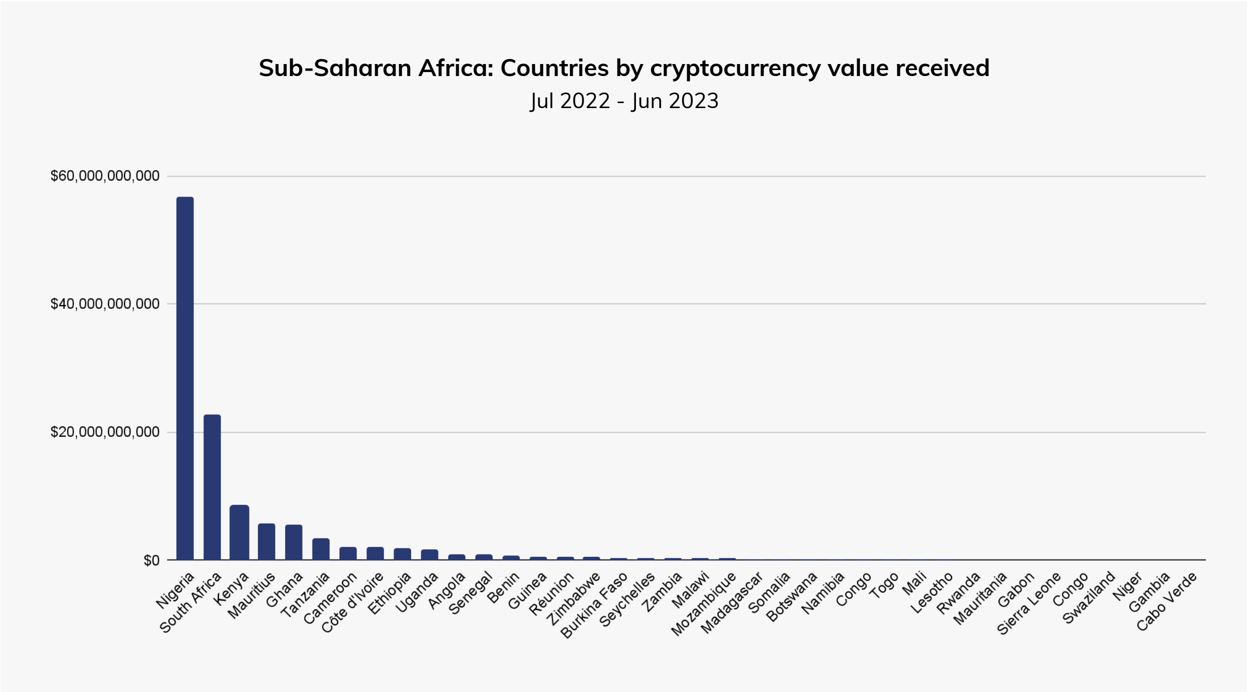
Sub-Saharan Africa

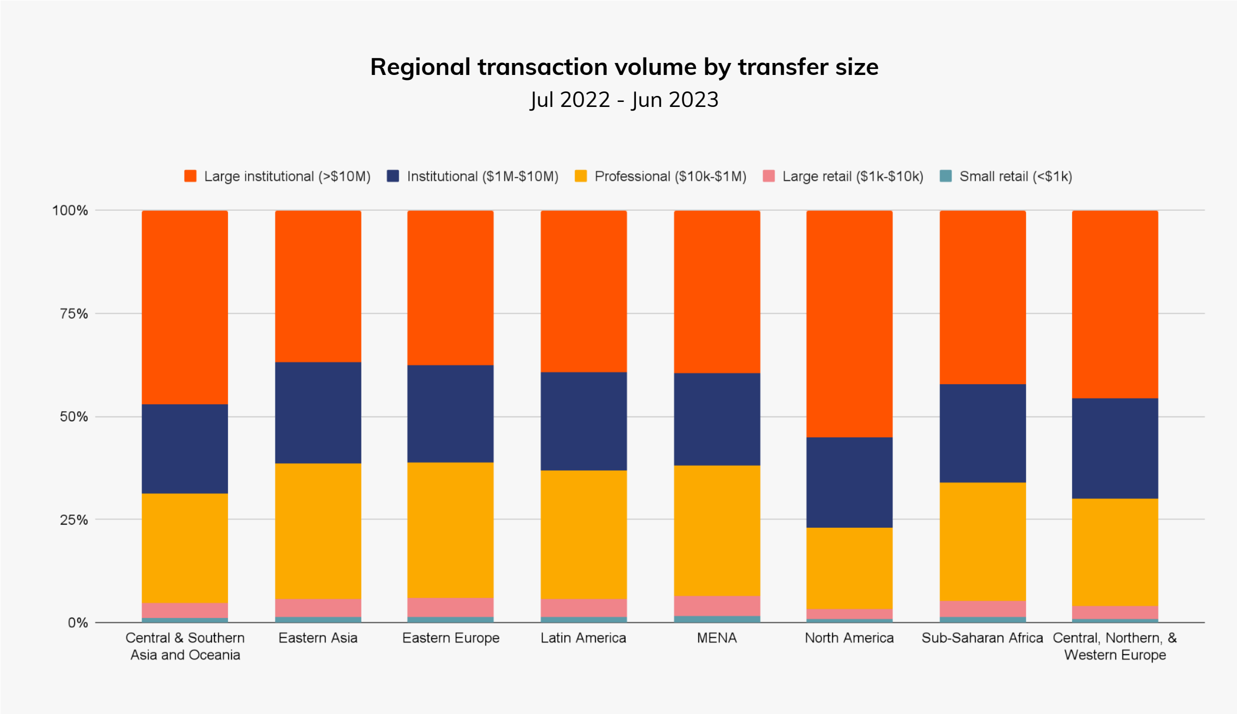


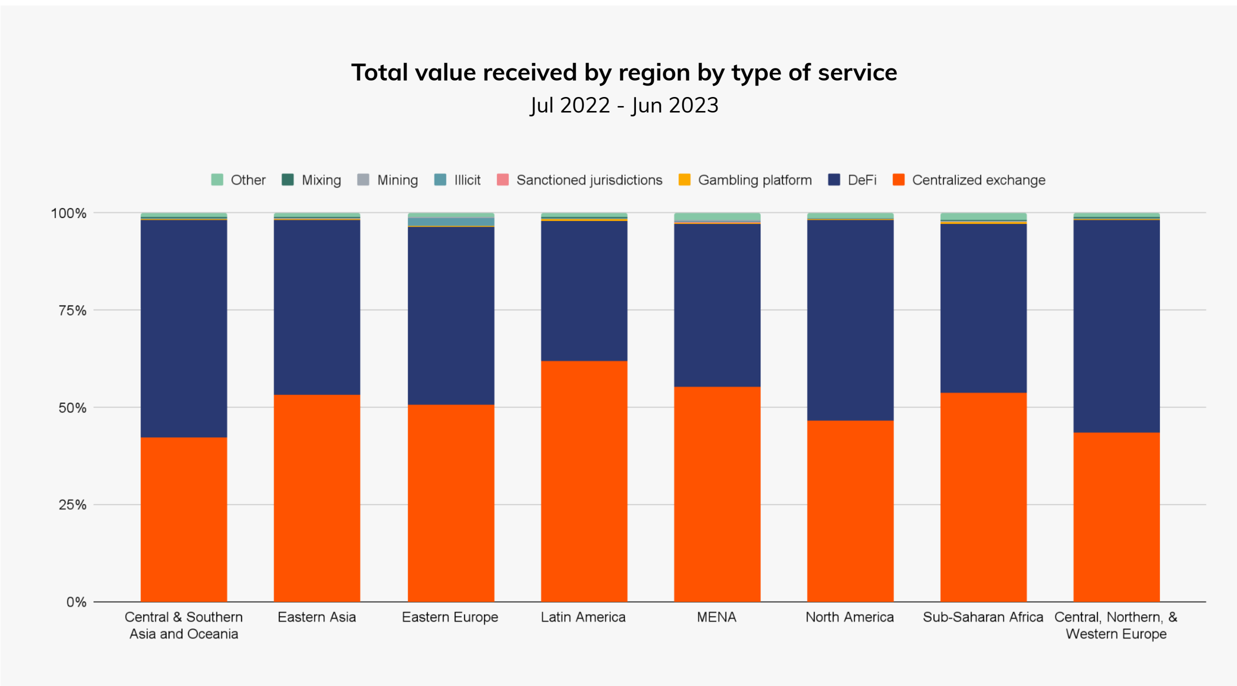
CRYPTOCURRENCY ACTIVITY SUMMARY

Sub-Saharan Africa



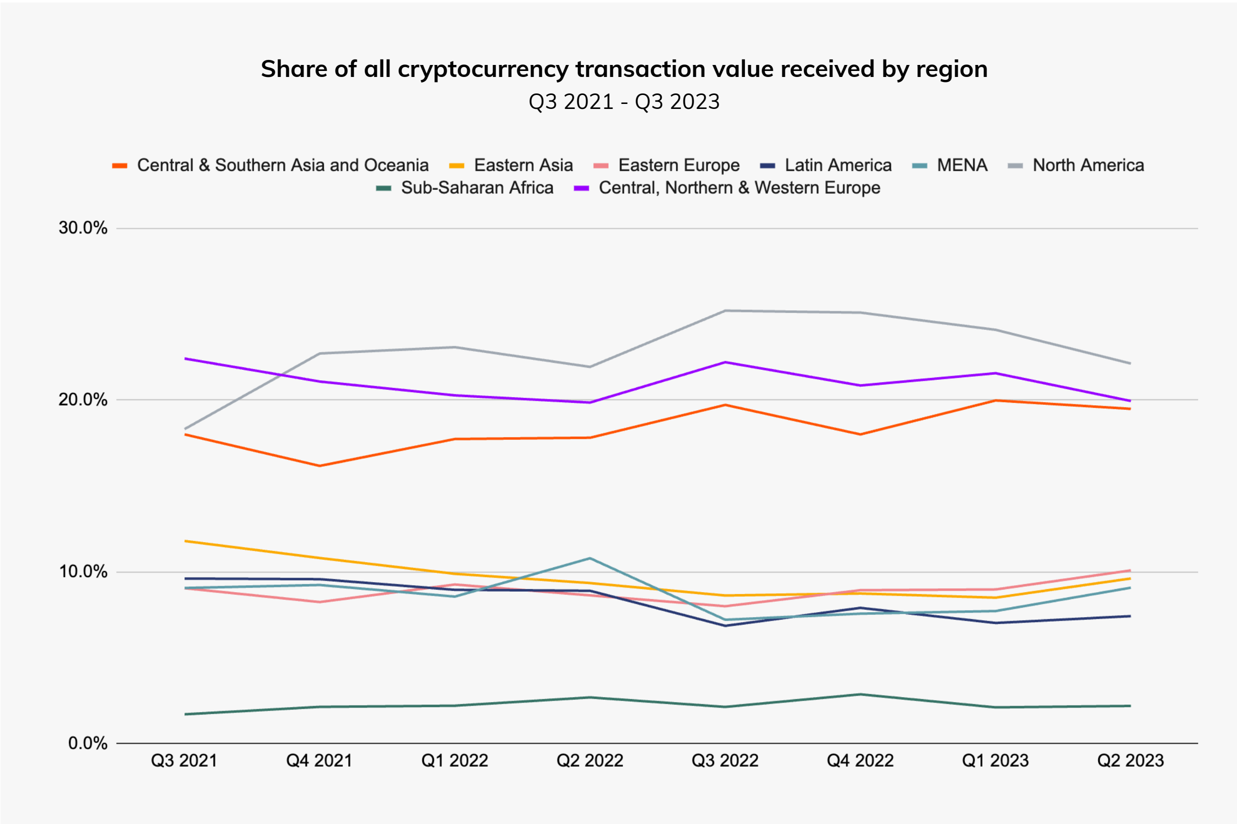



Regional transaction volume by transfer size
Jul 2022 - Jun 2023
Large institutional (>$10M)
Institutional ($1M-$10M)
Professional ($10k-$1M)
Large retail ($1k-$10k)
Small retail (<$1k)
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe


Total value received by region by type of service
Jul 2022 - Jun 2023
Other
Mixing
Mining
Illicit
Sanctioned jurisdictions
Gambling platform
DeFi
Centralized exchange
100%
75%
50%
25%
0%
Central & Southern Asia and Oceania
Eastern Asia
Eastern Europe
Latin America
MENA
North America
Sub-Saharan Africa
Central, Northern, & Western Europe

Cryptocurrency Penetrates Key Markets in Sub-Saharan Africa as an Inflation Mitigation and Trading Vehicle

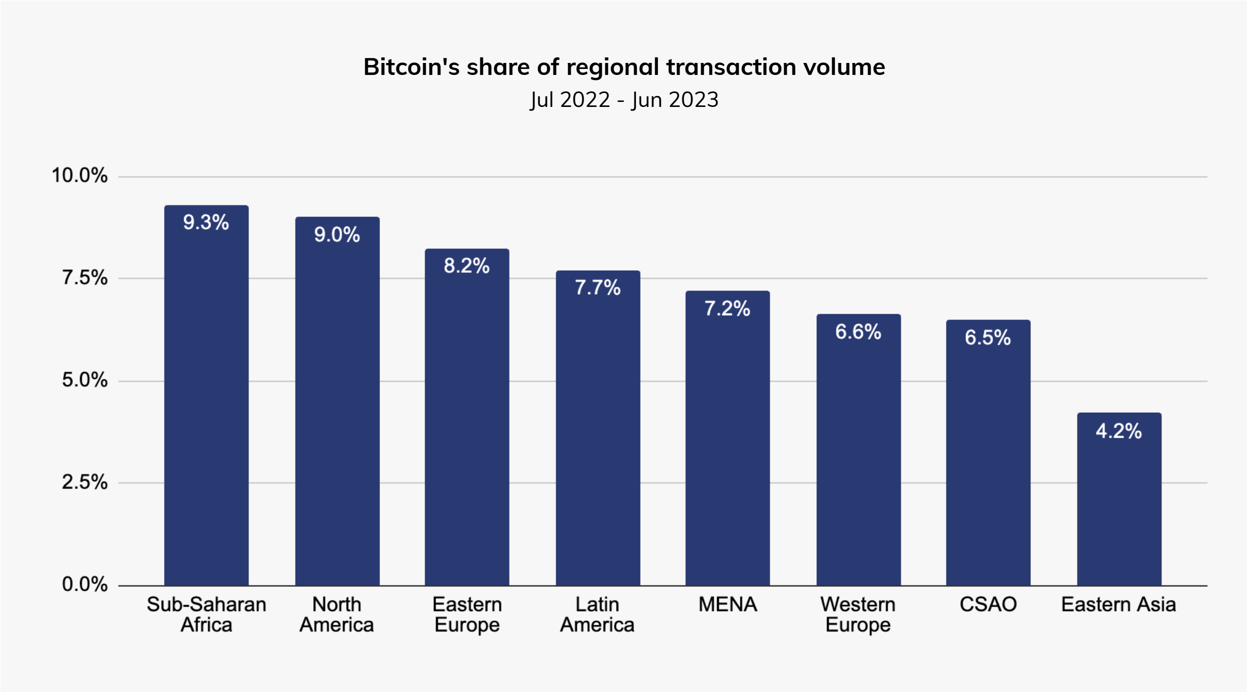
Similar to previous years, Sub-Saharan Africa has the smallest crypto economy of all regions, accounting for 2.3% of global transaction volume between July 2022 and June 2023. During that time period, the region received an estimated $117.1 billion in on-chain value.



Although Sub-Saharan Africa has consistently been one of the smallest cryptocurrency markets, a closer analysis reveals that crypto has penetrated key populations and become an important part of many residents' day-to-day lives. As we'll explore in more detail later, no country exemplifies this better than Nigeria, which ranks second overall on our Global Crypto Adoption Index. Other countries in the region ranking high on the index include Kenya (21), Ghana (29), and South Africa (31).

Citizens flock to Bitcoin and stablecoins to protect against inflation and debt

In no region is Bitcoin more dominant than Sub-Saharan Africa, as the world's first cryptocurrency makes up a bigger share of transaction volume there than in any other region.



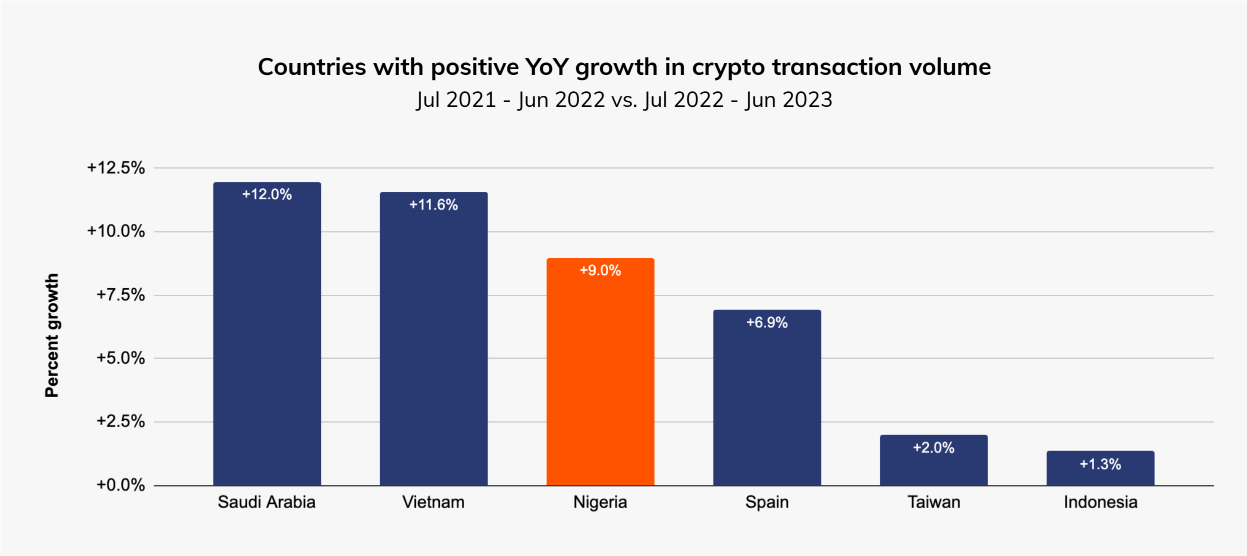
Why the disproportionate uptake of Bitcoin? It may be that Sub-Saharan Africa residents are turning to so-called digital gold for an alternative store of value. Many countries in the region have struggled with rising inflation and debt, making cryptocurrency an attractive means of storing value, preserving savings, and attaining greater financial freedom. In Ghana, for instance, inflation reached 29.8% in June 2022 after 13 consecutive months of increases — that marks its highest level in two decades. With relatively few financial opportunities, many Ghanians have turned to Bitcoin. Nigeria, Kenya, and South Africa have all faced similar problems in recent years, and all show a great deal of grassroots cryptocurrency adoption — that's probably no coincidence.

However, experts on the ground tell us that some market participants have turned away from Bitcoin and towards stablecoins of late, as these generally see less price volatility than Bitcoin, whose price is well off all-time highs. Moyo Sodipo, Co-Founder and CPO of Nigeria-based cryptocurrency exchange Busha, provided some insight into this activity, stating, "When Busha gained popularity around 2019 and 2020, there was a big frenzy for Bitcoin. A lot of people were not initially keen on stablecoins. Now that Bitcoin has lost a lot of its value, there is a desire for diversification between Bitcoin and stablecoins. However, market shifts aren't dampening activity. People are constantly looking for opportunities to hedge against the devaluation of the Naira and the persistent economic decline since COVID."

SPOTLIGHT

Nigeria is Africa's top crypto economy

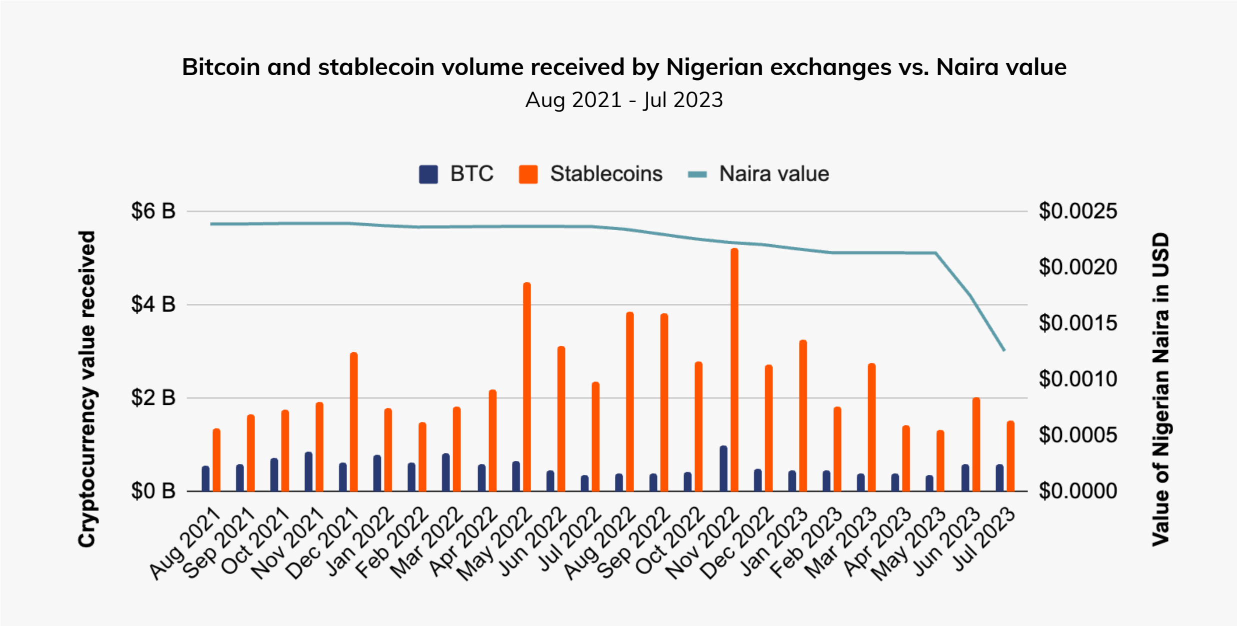
Nigeria boasts the largest population and economy in Sub-Saharan Africa, and as discussed above, the largest cryptocurrency economy as well. Perhaps even more notable is that Nigeria's crypto economy continues to grow despite market turmoil. In fact, Nigeria is one of only six countries in the top 50 globally whose crypto transaction volume grew year-over-year in the time period we studied. Its growth rate of 9.0% places it third among those six.



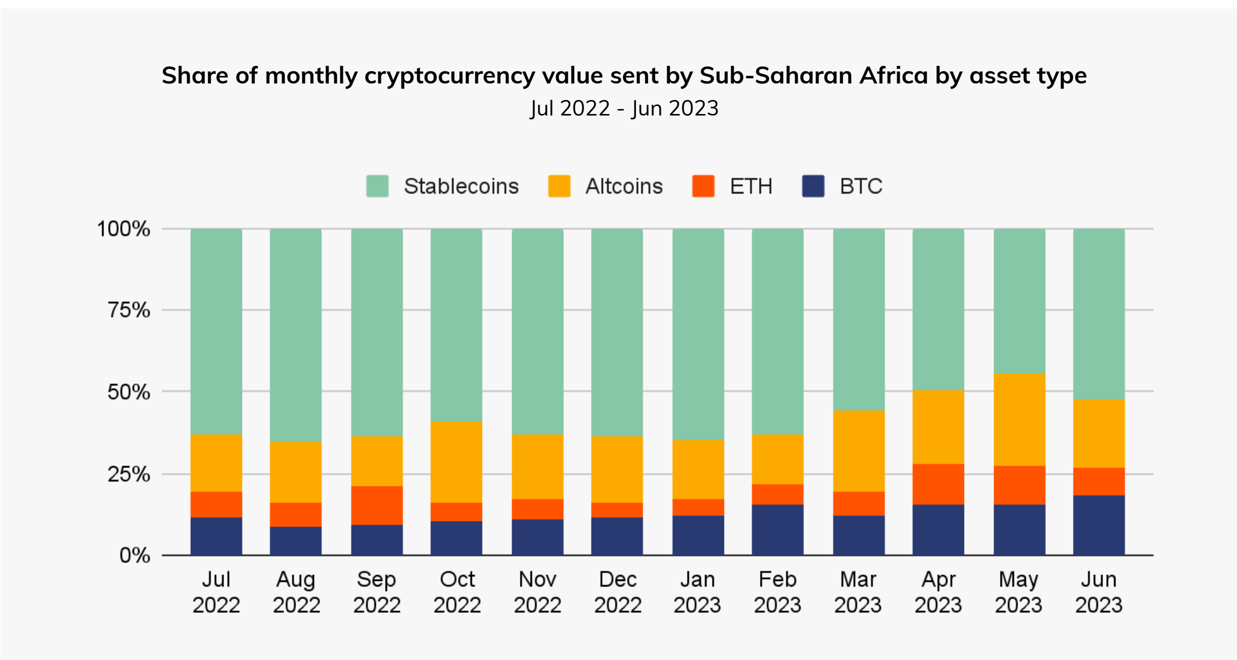
The evidence suggests crypto is one solution to Nigeria's economic challenges. Since 2016, Nigeria has suffered from two major recessions, fueled by an unstable political situation, the COVID-19 pandemic, and the collapse of oil prices. Consequently, Nigerians of all ages have faced high unemployment and many are up and moving to other countries.

The recent Naira crisis has exacerbated these issues. In 2022, the Central Bank of Nigeria announced its intentions to redesign the Naira and issue new notes in order to combat inflation and counterfeiting, as well as take more control over how much currency is circulating. Unfortunately, the resulting cash shortage placed enormous pressure on the country's unbanked population and triggered uncertainty regarding the use of old notes — all during an election period and a record high inflation rate of more than 20.0% at the beginning of 2023. Nigeria's uncertain economic climate has encouraged many citizens to seek financial alternatives, increasing the value proposition of cryptocurrency.

These dynamics are reflected in the data. On the chart below, we can see that interest in Bitcoin and stablecoins has generally risen as the Naira's value has decreased, particularly during the most recent extremely steep drops in June and July of 2023. The higher spikes around May and November of 2022, however, were likely driven more by users seeking to trade on the volatility spurred by TerraLuna and FTX's collapses respectively, as opposed to the local economic situation.



At the same time, interest in altcoins has been growing across the region. Moyo Sodipo explained, “On days when the market tanks, we’ve also seen a buying frenzy. It depends on the dynamics of the market at that point in time. When there is a new memecoin, like Dogecoin or Shiba, there has also been a buying frenzy. Someone is always going to be interested in a token that seems like it could make you the next couple thousand dollars.” The below chart illustrates this increase in altcoin activity.



Regulatory developments throughout Sub-Saharan Africa open the door to more crypto growth

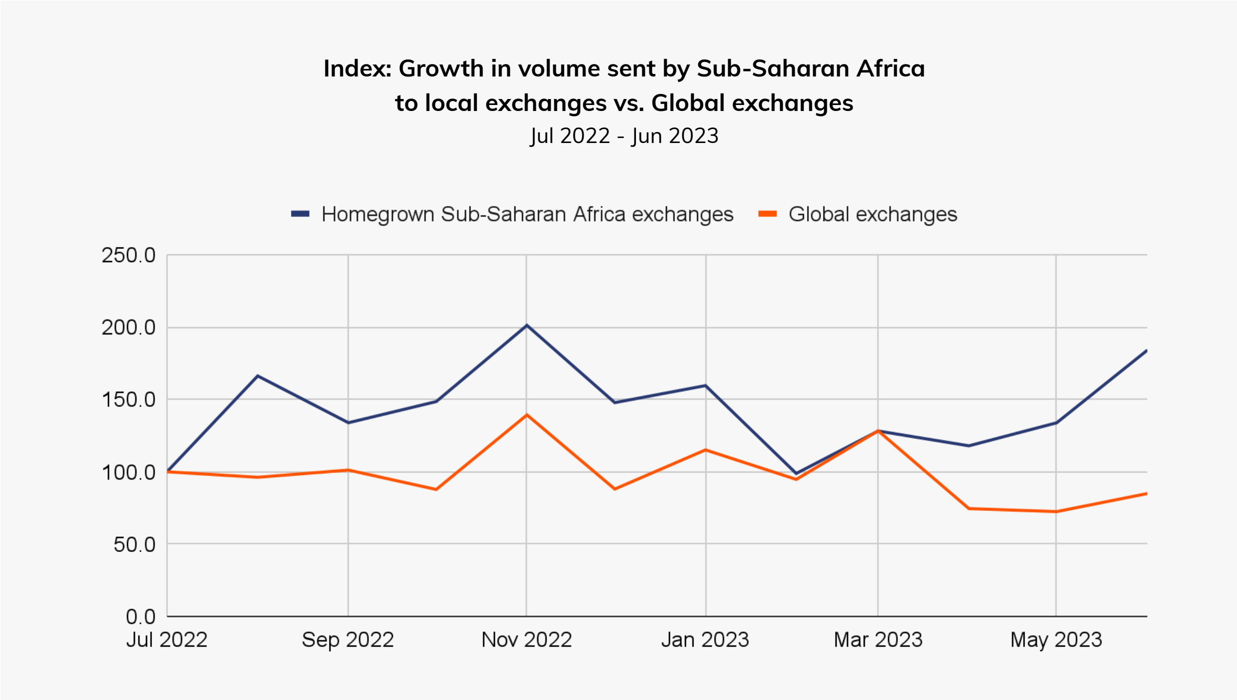
Regulation has also brought activity to exchanges in Sub-Saharan Africa. South Africa in particular has been one of the region's leaders in terms of crypto regulation and the development of supportive trading frameworks. At the end of 2022, the Financial Sector Conduct Authority (FSCA) announced a licensing regime for cryptocurrency businesses and declared that crypto assets are financial products, lending them greater legal clarity, and also empowering financial investigators to better fight illicit activity in the space.

The country's proactive approach to regulation has removed a lot of regulatory uncertainty and thus encouraged trading of both established and emerging digital tokens. In fact, citizens of the country have traded billions of dollars' worth of digital currency in recent years. According to Marius Reitz, General Manager Africa at South Africa-based exchange Luno, "Presently, the predominant use case for crypto in South Africa revolves around investment. Over the last 3 years, the number of customers holding a meaningful crypto balance on Luno has increased by almost 50%." He added, "In markets with no regulatory bans, we tend to see the industry develop more responsibly as the market operates above the ground, with more productive interaction between regulators and exchanges. But bans aren't stopping people from wanting crypto. The crypto industry will continue to grow with or without regulation. It is just in everyone's interest that there is some pragmatic regulation in place that protects consumers and creates a safer operating environment for all."

The Central Bank of Kenya (CBK) has also been navigating the crypto landscape, issuing statements on potential volatility risks at the same time as leaders consider the implementation of a CBDC. At the beginning of 2023, the government proposed a bill advocating for a consistent securities definition of digital currencies and diligent recordkeeping by licensed crypto traders. Around the same time, the Nigerian government approved a national blockchain policy, highlighting ways blockchain adoption can benefit the country and paving the way for future legal frameworks.

In Mauritius, which is slightly behind Kenya in terms of raw cryptocurrency transaction volume, the Virtual Assets and Initial Token Offering Services Act of 2021 has provided comprehensive legislation for new token issuance. The country's sustained dedication toward protecting consumers has helped promote crypto adoption and attracted traders while other countries in the region have issued explicit or implicit bans on certain crypto-related activities.

The increased regulatory clarity provided by the flurry of recent legislation may be helping Africa's local cryptocurrency industry. As discussed above, many of the most important crypto regulations enacted by Africa's biggest countries came around early 2023. Check out the chart below, which compares relative growth in Sub-Saharan Africa's usage of local, homegrown crypto exchanges vs. global exchanges.



The consumer safety afforded by better regulations, the confidence those regulations give consumers, and local crypto businesses' ability to comply with those regulations may be part of why local African exchanges have been outpacing international competitors on growth within the region since early 2023.

What's next for Sub-Saharan Africa's crypto economy?

The future of cryptocurrency in Sub-Saharan Africa looks bright, with large countries like Nigeria already taking their place as global leaders in crypto adoption. Increasing regulatory clarity throughout the region also appears to be bolstering growth, which local crypto operators appear primed to take advantage of. The key lesson though is the same we've gotten from studying emerging markets over the years: While residents of wealthier nations may buy and sell more cryptocurrency than those of emerging markets, the latter has a greater day-to-day need for cryptocurrency, very much in line with the original vision for Bitcoin and the sector at large.

The 2023 Global Crypto Adoption Index: The Full List

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
India	Central & Southern Asia and Oceania	1	1	1	5	1	1
Nigeria	Sub-Saharan Africa	2	3	2	1	4	4
Vietnam	Central & Southern Asia and Oceania	3	4	4	2	3	3
United States	North America	4	2	8	12	2	2
Ukraine	Eastern Europe	5	5	3	11	10	10
Philippines	Central & Southern Asia and Oceania	6	6	6	19	7	7
Indonesia	Central & Southern Asia and Oceania	7	13	13	14	5	5
Pakistan	Central & Southern Asia and Oceania	8	7	7	9	20	20
Brazil	Latin America	9	9	11	15	11	11
Thailand	Central & Southern Asia and Oceania	10	8	15	44	6	6
China	Eastern Asia	11	10	5	13	23	23
Turkey	Middle East & North Africa	12	11	9	35	12	12
Russia	Eastern Europe	13	12	10	36	9	9

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
United Kingdom	Central, Northern, & Western Europe	14	15	20	38	8	8
Argentina	Latin America	15	14	12	29	19	19
Mexico	Latin America	16	17	18	30	16	16
Bangladesh	Central & Southern Asia and Oceania	17	18	19	33	22	22
Japan	Eastern Asia	18	22	21	49	18	18
Canada	North America	19	25	23	62	14	14
Morocco	Middle East & North Africa	20	27	25	21	26	26
Kenya	Sub-Saharan Africa	21	20	34	3	55	55
Spain	Central, Northern, & Western Europe	22	28	32	63	13	13
France	Central, Northern, & Western Europe	23	26	28	55	21	21
Tanzania	Sub-Saharan Africa	24	57	62	6	27	27
Uzbekistan	Central & Southern Asia and Oceania	25	44	39	54	15	15
Germany	Central, Northern, & Western Europe	26	23	26	60	25	25
South Korea	Eastern Asia	27	16	16	75	29	29
Iran	Middle East & North Africa	28	33	14	57	31	31
Ghana	Sub-Saharan Africa	29	31	30	4	74	74
Cambodia	Central & Southern Asia and Oceania	30	45	43	56	17	17

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
South Africa	Sub-Saharan Africa	31	21	22	25	45	45
Colombia	Latin America	32	24	24	16	46	46
Taiwan	Eastern Asia	33	34	34	66	26	26
Poland	Eastern Europe	34	30	27	71	24	24
Egypt	Middle East & North Africa	35	29	29	24	50	50
Ethiopia	Sub-Saharan Africa	36	39	38	8	71	71
Italy	Central, Northern, & Western Europe	37	34	37	72	28	28
Malaysia	Central & Southern Asia and Oceania	38	42	51	40	37	37
Netherlands	Central, Northern, & Western Europe	39	38	46	69	32	32
Venezuela	Latin America	40	19	17	32	90	90
Australia	Central & Southern Asia and Oceania	41	37	42	70	33	33
Cameroon	Sub-Saharan Africa	42	70	71	7	51	51
Ecuador	Latin America	43	47	45	22	57	57
Belarus	Eastern Europe	44	40	36	61	41	41
Uganda	Sub-Saharan Africa	45	105	86	18	34	34
Kazakhstan	Central & Southern Asia and Oceania	46	41	35	81	40	40
Algeria	Middle East & North Africa	47	36	31	43	84	84
Hong Kong	Eastern Asia	48	56	69	87	30	30
Peru	Latin America	49	35	33	65	70	70

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Sri Lanka	Central & Southern Asia and Oceania	50	48	41	66	54	54
Laos	Central & Southern Asia and Oceania	51	49	40	106	35	35
Georgia	Middle East & North Africa	52	51	50	91	39	39
Myanmar	Central & Southern Asia and Oceania	53	50	52	17	91	91
Yemen	Middle East & North Africa	54	32	49	26	99	99
Tunisia	Middle East & North Africa	55	43	44	23	92	92
Nepal	Central & Southern Asia and Oceania	56	90	87	20	52	52
Saudi Arabia	Middle East & North Africa	57	61	53	73	49	49
Bulgaria	Eastern Europe	58	53	57	100	38	38
Portugal	Central, Northern, & Western Europe	59	55	66	82	43	43
Moldova	Eastern Europe	60	52	48	77	63	63
Romania	Eastern Europe	61	58	59	80	48	48
Czech Republic	Eastern Europe	62	59	60	93	44	44
Switzerland	Central, Northern, & Western Europe	63	71	85	90	36	36
Iraq	Middle East & North Africa	64	60	64	27	98	98
Cote d'Ivoire	Sub-Saharan Africa	65	85	73	46	78	78
Jordan	Middle East & North Africa	66	54	47	68	87	87

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Serbia	Central, Northern, & Western Europe	67	65	67	89	53	53
Chile	Latin America	68	66	65	76	69	69
West Bank and Gaza	Middle East & North Africa	69	46	84	28	107	107
Sweden	Central, Northern, & Western Europe	70	68	68	79	67	67
Dominican Republic	Latin America	71	63	58	45	96	96
Kyrgyzstan	Central & Southern Asia and Oceania	72	64	54	122	42	42
Hungary	Eastern Europe	73	79	77	96	47	47
Azerbaijan	Middle East & North Africa	74	67	56	99	72	72
Israel	Middle East & North Africa	75	76	79	94	56	56
Greece	Central, Northern, & Western Europe	76	69	72	104	61	61
Singapore	Central & Southern Asia and Oceania	77	82	101	84	59	59
UAE	Middle East & North Africa	78	77	89	102	60	60
Bolivia	Latin America	79	62	55	64	111	111
Benin	Sub-Saharan Africa	80	123	119	34	79	79
Belgium	Central, Northern, & Western Europe	81	74	82	105	75	75
Mozambique	Sub-Saharan Africa	82	92	88	37	112	112
Senegal	Sub-Saharan Africa	83	121	115	58	76	76

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Austria	Central, Northern, & Western Europe	84	73	78	127	65	65
Albania	Central, Northern, & Western Europe	85	106	110	98	58	58
Mongolia	Eastern Asia	86	86	70	74	103	103
Haiti	Latin America	87	103	113	42	101	101
Lithuania	Central, Northern, & Western Europe	88	88	94	121	66	66
Armenia	Middle East & North Africa	89	81	63	113	88	88
New Zealand	Central & Southern Asia and Oceania	90	107	112	101	68	68
Malawi	Sub-Saharan Africa	91	108	118	47	104	104
Costa Rica	Latin America	92	84	100	103	86	86
Jamaica	Latin America	93	98	103	50	113	113
Nicaragua	Latin America	94	117	111	86	77	77
El Salvador	Latin America	95	80	80	88	108	108
Paraguay	Latin America	96	111	99	92	85	85
Panama	Latin America	97	113	114	95	81	81
Slovakia	Eastern Europe	98	75	81	115	97	97
Finland	Central, Northern, & Western Europe	99	97	97	123	80	80
Latvia	Central, Northern, & Western Europe	100	78	91	148	64	64

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Slovenia	Central, Northern, & Western Europe	101	72	98	129	82	82
Croatia	Central, Northern, & Western Europe	102	91	93	109	95	95
Zimbabwe	Sub-Saharan Africa	103	83	102	52	120	120
Guatemala	Latin America	104	87	76	126	100	100
Honduras	Latin America	105	99	90	97	109	109
Guinea	Sub-Saharan Africa	106	131	129	78	73	73
Estonia	Central, Northern, & Western Europe	107	102	92	139	83	83
Angola	Sub-Saharan Africa	108	100	106	67	116	116
Lebanon	Middle East & North Africa	109	101	96	83	118	118
Burkina Faso	Sub-Saharan Africa	110	94	83	39	131	131
Norway	Central, Northern, & Western Europe	111	116	116	124	102	102
Denmark	Central, Northern, & Western Europe	112	104	105	138	106	106
North Macedonia	Central, Northern, & Western Europe	113	112	109	147	89	89
Somalia	Sub-Saharan Africa	114	95	74	111	125	125
Ireland	Central, Northern, & Western Europe	115	115	125	131	94	94

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Kuwait	Middle East & North Africa	116	119	122	130	93	93
Mauritius	Sub-Saharan Africa	117	138	141	110	62	62
Togo	Sub-Saharan Africa	118	126	120	51	129	129
Libya	Middle East & North Africa	119	125	124	108	114	114
Zambia	Sub-Saharan Africa	120	114	117	41	132	132
Uruguay	Latin America	121	110	107	117	123	123
Puerto Rico	North America	122	120	131	133	105	105
Cyprus	Middle East & North Africa	123	118	121	145	110	110
Mali	Sub-Saharan Africa	124	127	108	31	137	137
Madagascar	Sub-Saharan Africa	125	93	95	53	138	138
Bosnia and Herzegovina	Central, Northern, & Western Europe	126	109	123	144	119	119
Bahamas	Latin America	127	130	130	128	117	117
Luxembourg	Central, Northern, & Western Europe	128	143	145	107	115	115
Trinidad and Tobago	Latin America	129	133	136	112	127	127
Democratic Republic of Congo	Sub-Saharan Africa	130	96	75	10	145	145
Syria	Middle East & North Africa	131	124	104	85	140	140
Montenegro	Central, Northern, & Western Europe	132	129	132	149	124	124
Bahrain	Middle East & North Africa	133	136	142	141	122	122

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Macao	Eastern Asia	134	135	135	143	128	128
Tajikistan	Central & Southern Asia and Oceania	135	122	128	116	139	139
Cuba	Latin America	136	132	126	136	134	134
Oman	Middle East & North Africa	137	140	138	150	121	121
Qatar	Middle East & North Africa	138	139	137	142	130	130
Malta	Central, Northern, & Western Europe	139	141	143	151	126	126
Namibia	Sub-Saharan Africa	140	134	140	118	142	142
Maldives	Central & Southern Asia and Oceania	141	150	148	114	136	136
Rwanda	Sub-Saharan Africa	142	137	133	48	147	147
Seychelles	Sub-Saharan Africa	143	145	134	134	143	143
Botswana	Sub-Saharan Africa	144	144	147	132	141	141
Antigua and Barbuda	Latin America	145	148	151	135	135	135
Niger	Sub-Saharan Africa	146	149	144	59	146	146
Afghanistan	Middle East & North Africa	147	128	127	125	149	149
Barbados	Latin America	148	89	61	119	151	151
Suriname	Latin America	149	147	146	146	144	144
Gabon	Sub-Saharan Africa	150	151	150	120	148	148
Iceland	Central, Northern, & Western Europe	151	146	149	153	133	133

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	P2P exchange trade volume ranking	DeFi value received ranking	Retail deFi value received ranking
Fiji	Central & Southern Asia and Oceania	152	142	139	137	152	152
Brunei Darussalam	Central & Southern Asia and Oceania	153	152	152	152	150	150
Cabo Verde	Sub-Saharan Africa	154	153	153	140	154	154
Guyana	Latin America	155	154	154	154	153	153

Chainalysis

Building trust in blockchains

About Chainalysis

Chainalysis is the blockchain data platform. We provide data, software, services, and research to government agencies, exchanges, financial institutions, and insurance and cybersecurity companies in over 70 countries. Our data powers investigation, compliance, and market intelligence software that has been used to solve some of the world's most high-profile criminal cases and grow consumer access to cryptocurrency safely. Backed by Accel, Addition, Benchmark, Coatue, GIC, Paradigm, Ribbit, and other leading firms in venture capital, Chainalysis builds trust in blockchains to promote more financial freedom with less risk. For more information, visit www.chainalysis.com.

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