

CLOSER TO CRYPTO

# ANNUAL REPORT: CRYPTOCURRENCY MARKET IN 2023

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# HIGHLIGHTS

- The year 2023 in the cryptocurrency market was marked by a positive mood and optimism. In response to the banking crisis, the possible approval of a spot ETF as well as the coming Bitcoin halving, the Bitcoin price rose by 155.7%.
- Both U.S. and European banks ran into huge financial problems during the first quarter. Some of the major banks could not cope with these turbulent times.
- The European Union opened the door to cryptocurrencies in the second quarter, officially approving the regulation of cryptocurrencies in the European Union called Markets in Crypto Assets (MiCA).
- The U.S. Securities and Exchange Commission (SEC) declared war on cryptocurrencies last year. It charged the two largest crypto exchanges and designated more than 60 cryptocurrencies as securities.
- More than 10 companies have filed applications to create a spot bitcoin ETF over the course of the year. They include BlackRock, the world's largest asset management company, which has more than \$8 trillion in assets under management.
- The Federal Reserve (Fed) has not raised interest rates in the United States since July. It is not expected to raise rates further and a potential „pivot“, i.e. a cut in interest rates during 2024, is also in play.
- Ripple Labs won a lawsuit against the U.S. Securities and Exchange Commission (SEC) regarding the sale of unregistered securities.
- In addition to Ripple, Grayscale also succeeded in its dispute with the SEC. According to court documents released on August 29, Judge Neomi Rao of the US Court of Appeals for the Central District of New York ruled that Grayscale's petition for review will be granted and the SEC's decision to deny GBTC's transformation into a spot ETF will be reversed
- Payments giant PayPal has launched its own stablecoin on the Ethereum blockchain called PayPal USD (PYUSD).

# TABLE OF CONTENTS

<b>HIGHLIGHTS</b>	<b>2</b>
<b>TABLE OF CONTENTS</b>	<b>3</b>
<b>YEAR 2023 IN NUMBERS</b>	<b>5</b>
Market Capitalization of the Crypto Market	5
Market Dominance	6
Bitcoin in 2023	7
Monthly Bitcoin Returns in 2023	8
Market Capitalization of Bitcoin in 2023	9
Ethereum in 2023	10
Monthly Return of Ethereum in 2023	10
Performance of Popular Altcoins in 2023	11
<b>HIGHLIGHTS OF 2023</b>	<b>12</b>
US Banking Crisis	12
Approval of the European Cryptocurrency Regulation MiCA	12
Several Companies Are Planning to Launch Spot ETFs	13
Ripple Labs Succeeds in Lawsuit With SEC	13
Ethereum Shanghai Update	14
Payments Giant Paypal Has Launched Its Own Stablecoin	14
<b>CRYPTOCURRENCIES AND THE WORLD OF TRADITIONAL FI-</b>	
<b>NANCE</b>	<b>15</b>
The Fed Paused Interest Rate Hikes	15
Brazil's Largest Bank Launches Crypto Services	15
Inflation in the US Continues to Decline	15
Argentina Has a Pro-Bitcoin President	16
<b>ON-CHAIN DATA - BITCOIN</b>	<b>17</b>
BTC – Addresses Count	17
BTC – Addresses With a Balance Greater Than 1 BTC	18
BTC – Circulating Supply	19
BTC – 1 Year Active Supply	19
BTC – Balance on Exchanges	20
BTC – Average Transaction Fees	20
BTC – Hashrate	21
BTC – Fear & Greed Index	22

# TABLE OF CONTENTS

<b>ON-CHAIN DATA - ETHEREUM</b>	<b>23</b>
ETH – Active Addresses Count	23
ETH – Addresses with Balance Greater Than 0.1 ETH	24
ETH – Average Transaction Fees	25
ETH – Circulating Supply	26
ETH – Total ETH Staked	26
<b>DEFI RETROSPECTIVE</b>	<b>27</b>
Number of DeFi Apps Users	27
DeFi – Total Value Locked (TVL)	28
TVL by Chains	28
The Most Popular DeFi Apps	29
The Most Popular Decentralized Exchanges by Volume Traded	29
The volume on decentralized exchanges in selected years	29
Protocol Analysis – Arbitrum	30
Hacks in the DeFi Sector	31
Mixin Network – \$200 million	31
Euler Finance – \$197 million	31
Multichain – \$125 million	31
<b>STABLECOINS</b>	<b>32</b>
Stablecoins Overview	32
USDT – Freezing of Funds Related to Criminal Activity	33
Stablecoin USDC Expands on Arbitrum Network	33
<b>FUMBI IN 2023</b>	<b>34</b>
Advanced Portfolios	34
Automatic Deposit	34
Gift Voucher	34
We Have Completed a Wallet Audit	35
Quarterly Updates of Our Products	35
Fumbi Celebrated Fifth Birthday	35
<b>INVEST IN CRYPTOCURRENCIES WITH FUMBI</b>	<b>37</b>
Fumbi Product Portfolio	37

# YEAR 2023 IN NUMBERS

## Market Capitalization of the Crypto Market

**Total Market Cap in 2023**



Source: [Coinmarketcap](https://www.coinmarketcap.com)

The value of the entire cryptocurrency market was at \$793 billion in early 2023. Over the past calendar year, the crypto market capitalization grew 110% to a year-end level of \$1.67 trillion. The highest market capitalization in 2023 was reached on December 28, 2023, at \$1.69 trillion.

## Market Dominance



Source: TradingView

The downward trend of bitcoin dominance from 2022 has completely reversed in 2023. During this period, bitcoin has significantly strengthened its market position and increased its dominance to 51.59% by December 31, 2023.

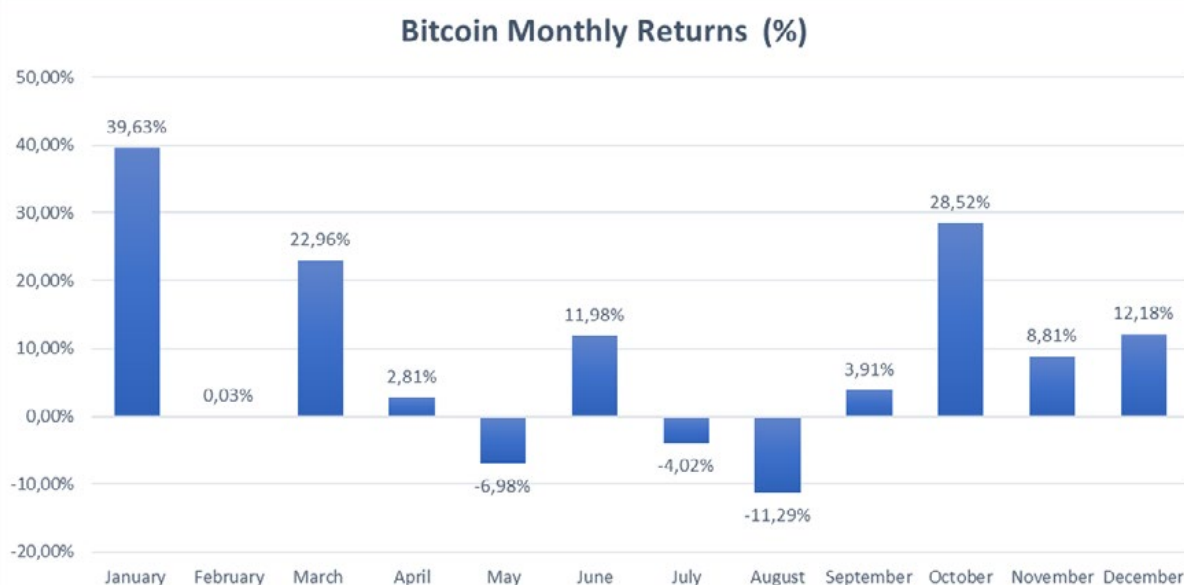
## Bitcoin in 2023



Source: Messari

Bitcoin opened in 2023 at \$16,531 and closed at \$42,282. The value of bitcoin increased by 155.7% compared to the beginning of 2023. The rise in the value of Bitcoin was driven in the first half of the year by the banking crisis in the United States and the subsequent euphoria surrounding the possibility of the approval of a spot bitcoin ETF in the United States. The victories of Ripple Labs and Grayscale in their lawsuits against the SEC also contributed to the positive market sentiment and the rise in Bitcoin's price. The highest value of bitcoin this year was recorded on December 8, when the price of bitcoin climbed as high as \$44,717.

## Monthly Bitcoin Returns in 2023



Source: Fumbi research

During this year, bitcoin has seen as many as 9 months with a positive monthly return and only 3 months with a negative monthly return. The best month of the past calendar year for bitcoin was the month of January, when bitcoin rose as much as 39.63%.

## Market Capitalization of Bitcoin in 2023



Source: [Coinmarketcap](https://coinmarketcap.com)

Bitcoin opened the year with a market capitalization of \$319 billion and closed it with a capitalization of \$828 billion. Overall, bitcoin's market capitalization grew by as much as 159% during the year. Since the market peak reached in November 2021, Bitcoin's market capitalization is down roughly -34%.

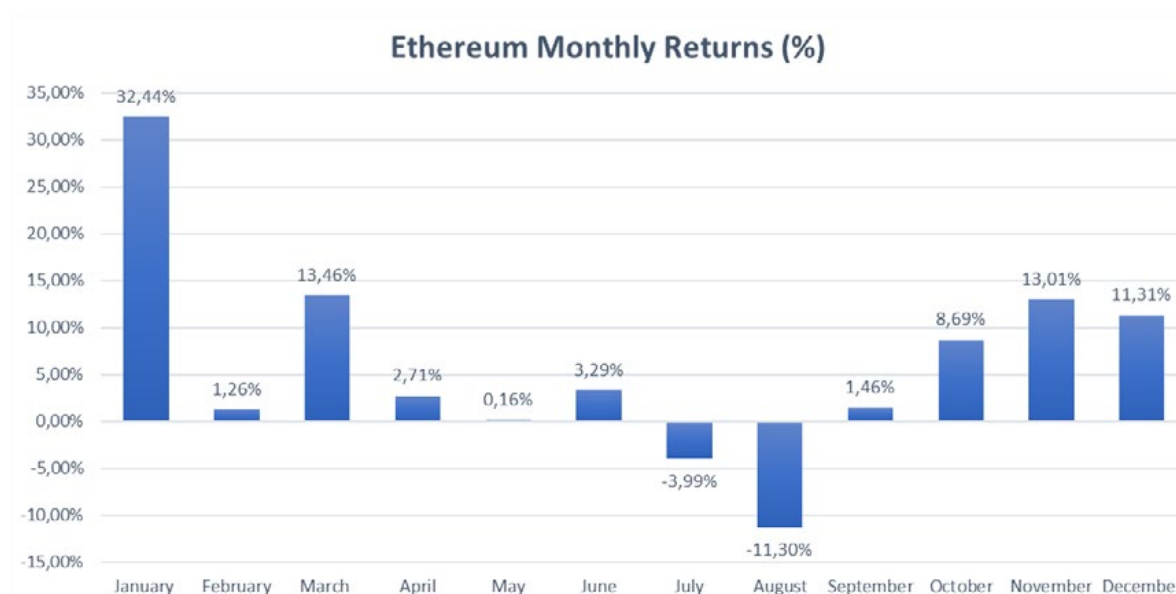
## Ethereum in 2023



Source: *Coinmarketcap*

The Ethereum opened 2023 at a price of \$1,197. Ethereum's valuation has increased by 90.16% during this year to a value of \$2,281.97 as of December 31, 2023. At the same time, the price of Ethereum is in a decline of -52% from its price peak reached in November 2021.

## Monthly Return of Ethereum in 2023



Source: *Fumbi research*

Over the course of this year, Ethereum has seen 10 months with a positive monthly return and only 2 months with a negative return. The best month for Ethereum was the month of January, during which Ethereum rose as much as 32.44%.

## Performance of Popular Altcoins in 2023



Source: Tradingview

Among the top altcoins tracked, the Solana (SOL) achieved the highest performance during 2023, rising as much as 918.2%. Among the TOP 10 altcoins tracked, the Dogecoin (DOGE) fared the worst, growing by only 27.49% in 2023.

## HIGHLIGHTS OF 2023

### US Banking Crisis

Chaos, panic and uncertainty. This is a simple way of describing the March crisis of banking institutions in the United States and Europe. Following massive interest rate increases by the Fed, several major U.S. banks ran into trouble. The uncertainty in the banking sector subsequently spread from overseas to Europe and tested the stability of several European institutions.

The first bank to run into trouble was the U.S.-based Silvergate, which was known for its pro-crypto orientation and business relationships with several crypto companies, including Coinbase and Paxos. Silvergate first delayed releasing its 10-K (a comprehensive report on financial results filed annually by public companies) to the U.S. Securities and Exchange Commission (SEC), which scared off investors and shareholders of the bank. The company became embroiled in a liquidity crisis and, in agreement with the Federal Deposit Insurance Corporation (FDIC), the bank announced that it was ceasing operations.

A few days later, however, the US banking sector was dealt a much bigger and more significant blow. Overall, the 16th largest U.S. bank, Silicon Valley Bank, with assets of more than \$200 billion, came under scrutiny by U.S. regulators, who concluded that the bank needed to be shut down altogether. The collapse of Silicon Valley Bank is the biggest banking meltdown in the U.S. since the collapse of Washington Mutual in 2008.

However, the spread of the financial contagion continued. Just days after the collapse of Silicon Valley Bank, everyone was shocked by the news that Signature Bank, a New York bank with a large real estate lending business, closed its doors over the weekend after regulators said the bank's continued operations could threaten the stability of the entire financial system. Signature Bank was worth more than \$110 billion in assets, and its closure marks the third-largest drop in the U.S. banking system in history.

Other banks have also run into trouble. Dozens of regional banks suspended trading in the following days as their share prices fell by tens of percent. Regional bank Western Alliance saw its shares drop by more than 50%, while First Republic Bank's shares fell by as much as 64%. Less than a week after the collapse of Silicon Valley Bank, the financial contagion has spread to Europe. The shares of several European banks fluctuated significantly during the trading days and the market situation was volatile.

However, the well-known Swiss bank Credit Suisse, which had assets under management of more than €1.5 billion, got into big trouble. On Sunday, March 19, 2023, Switzerland's largest bank, UBS, stepped in to take over its long-time rival Credit Suisse as part of a rescue plan. At a joint press conference, representatives of both banks, along with representatives of the government, the Swiss central bank and regulatory authorities, agreed that UBS would take over Credit Suisse for about \$2 billion.

Uncertainty in the banking sector has driven up the prices of alternative assets used to protect assets. Bitcoin surged more than 20% in March in response to the banking crisis, and gold rose above \$2,000 for the first time since early 2022.

### Approval of the European Cryptocurrency Regulation MiCA

In the second half of April, the European Parliament formally approved the MiCA (Markets in Crypto Assets) regulation, which introduces regulation of cryptocurrencies in the European Union. This regulation will allow central banks to license cryptocurrency businesses and ensure the security and fairness of the crypto services provided.

The approval and implementation of new cryptocurrency regulation in the European Union will entail a number of new rules and principles. The most important ones will concern entities that issue and trade cryptoassets (including reference asset tokens and e-money tokens). These entities will be obliged to implement new procedures and rules in order to increase transparency, disclosure of documents, authorization or oversight of transactions. In matters of transparency, they will have to publish all relevant information more transparently and unambiguously, so that consumers are accurately and clearly informed of the risks, costs or charges associated with their operation.

In addition, the regulation will promote market integrity and financial stability by regulating public offerings of crypto-assets, where crypto-asset issuers will face much higher disclosure standards, including the obligation to publish a so-called Whitepaper (a document describing the technological and economic characteristics) for each asset. Issuers of stablecoins will also be subject to strict rules and will have to demonstrate, for example, that they hold sufficient and liquid reserves to cover the stablecoin issued.

The regulatory framework also contains various measures against market manipulation and to prevent money laundering, terrorism financing and other criminal activities. In order to counter and combat the risks of money laundering, the European Securities and Markets Authority (ESMA) should establish a public register for non-compliant and unauthorized cryptoasset service providers operating in the European Union.

As cryptocurrencies have so far been perceived as unregulated assets in the European Union, banks and other financial institutions have preferred to avoid them. However, the approval and integration of appropriate regulation will likely bring about a significant change in this area and the possible entry of banking players into this sector. Crypto companies wishing to do business in this area will need to apply for a license to operate and demonstrate not only capital readiness but also strict adherence to prudential principles.

## Several Companies Are Planning to Launch Spot ETFs

The coming era of Bitcoin investment may be heavily influenced by plans by several companies to launch spot ETFs for the most popular and largest cryptocurrency on the market. A Bitcoin spot ETF is expected to open the door to the general public to invest in digital assets, increasing their accessibility and acceptance among traditional investors. In fact, spot ETFs should allow investors to gain exposure to Bitcoin without having to own it directly.

The impact of planned spot ETFs on Bitcoin can be significant for a number of reasons. First, the approval of these ETFs could attract new investors who prefer conventional financial instruments to outright ownership of cryptocurrency. This could increase overall interest in Bitcoin and also contribute to its value growth.

The second important factor is the increased liquidity that spot ETFs could bring to the Bitcoin market. These investment vehicles would make trading easier and more efficient, which could help stabilize the Bitcoin price. This liquidity could be particularly beneficial for institutional investors seeking easier access to this growing asset class.

Overall, the planned spot bitcoin ETFs could open up new avenues for investing in cryptocurrencies and contribute to a wider adoption of this digital asset. However, as with any investment, it is important to be aware of the potential risks and keep an eye on regulatory developments that could have a significant impact on the growing crypto market.

## Ripple Labs Succeeds in Lawsuit With SEC

Back in 2020, the U.S. Securities and Exchange Commission (SEC) filed a lawsuit against Ripple Labs Inc. and some of its executives. The SEC said in its action at the time that the sale of the XRP cryptocurrency, of which Ripple Labs was the issuer, was illegal because the Commission viewed the XRP token as an unregistered security.

However, Ripple Labs decided to defend itself and prove that the Commission was wrong and that XRP is not a security. Ripple officials argued that XRP is a cryptocurrency and its distribution and use were not under the company's control and therefore should not be considered a security. The dispute between Ripple and the SEC has dragged on for more than 2.5 years.

Around mid-July, however, there was significant progress in this litigation. Judge Analisa Torres, who was in charge of the dispute between Ripple and the SEC, issued a partial ruling that XRP cryptocurrency sold to retail investors on exchanges and through algorithms is not a security. However, the judge also ruled that the offering of XRP to institutional investors was a sale of unregistered securities.

The judge's decision is viewed very positively by the wider crypto community. Indeed, the recognition that XRP is not a security when sold to retail investors sets an important precedent for other lawsuits, as the SEC has recently accused countless crypto projects of offering to sell unregistered securities. Although the decision is specific to this particular case, it is likely to provide a fresh charge for other institutions battling the SEC over whether their products fall under the regulator's jurisdiction.

An SEC spokesman said the agency was satisfied with the part of the ruling in which the judge ruled that Ripple violated federal securities law by directly selling XRP to institutional investors. However, the agency was not very happy with the ruling regarding sales to retail investors.

In response to the verdict, the price of the cryptocurrency XRP rose by as much as 75% shortly after the verdict was announced. Other altcoins, such as Polygon (MATIC) and Cardano (ADA), which were also designated as securities by the SEC a few months ago, also rose massively at the same time.

## Ethereum Shanghai Update

On the night of Tuesday, April 12, 2023, a long-awaited update to the Ethereum network called Shanghai was successfully integrated. This update triggered the ability to withdraw staked ETH from the protocol, fully completing the Ethereum network's transition to Proof-of-Stake.

The road to the Shanghai upgrade and the ETH stakeholder choice was long and full of trade-offs. Compromises were necessary especially on the part of the Ethereum network developers, who made several concessions just so that the update could be implemented as soon as possible. The Shanghai update was originally supposed to contain a number of other improvements, including the so-called proto-danksharding or a set of necessary updates for the Ethereum Virtual Machine (EVM). However, these enhancements have been removed from this update to ensure that ETH withdrawals are made available to users as soon as possible.

Immediately following the update, approximately 285 withdrawals were processed in an epoch of 194,408 for an amount of approximately 5,413 ETH (roughly \$10 million at the time). However, data from analytics platform CryptoQuant shows that the number of ETH staked is continuously growing, and currently more than 28 million ETH are already staked, which is more than 23% of the total circulating ETH inventory.

## Payments Giant Paypal Has Launched Its Own Stablecoin

Payment giant Paypal has expanded its footprint in the world of cryptocurrencies in 2023. In early August 2023, the company launched its own stablecoin called PayPal USD (PYUSD), which is reportedly fully backed by deposits in US dollars. Stablecoin can be bought and sold directly through the PayPal app or website, with a 1:1 exchange rate between the dollar and PYUSD.

Through this stablecoin, users can make peer-to-peer payments, make purchases in stores, and transfer it between PayPal accounts and other external wallets. PayPal also allows conversion between PYUSD and other cryptocurrencies supported by the platform, such as Bitcoin or Litecoin.

Stablecoin PYUSD is built on the Ethereum blockchain and is issued by Paxos Trust Company, a New York-based firm that provides regulated blockchain infrastructure to clients. Paxos is the issuer of a number of well-known assets, such as Binance's stablecoin BUSD or the cryptocurrency PaxGold, which is backed by real gold.

PayPal's decision to create its own stablecoin is no surprise, as the company joined the crypto world back in 2020. Back then, the company allowed users to buy, transfer and sell cryptocurrencies Bitcoin, Bitcoin Cash, Ethereum and Litecoin directly within its app. Last year, the company acquired a New York BitLicense, which allows customers in the state to buy and sell cryptocurrencies.

# CRYPTOCURRENCIES AND THE WORLD OF TRADITIONAL FINANCE

## The Fed Paused Interest Rate Hikes

The Federal Reserve left interest rates unchanged in December, signaling that the tightening of U.S. monetary policy that has lasted for the past two years is slowly but surely coming to an end, according to new economic projections.

According to the available information, as many as 17 out of 19 Fed policymakers perceive the need to cut interest rates by the end of 2024 in the current situation. However, everything will depend on the development of the inflation rate in the United States, which is one of the most important indicators of the possible direction of the Fed's monetary policy.

The Fed is legally responsible for maintaining stable prices (inflation) and maximum employment, the two main economic goals. After inflation jumped to a 40-year high last year, the Fed chairman said during a recent press conference that inflation is slowly returning to the Fed's 2% target, while at the same time, unemployment remains relatively low.

## Brazil's Largest Bank Launches Crypto Services

Itau Unibanco, Brazil's largest bank, launched a cryptocurrency trading service for clients on its investment platform in early December, directly confirming its entry into the digital asset market.

In its early days, the service supported Bitcoin and Ethereum cryptocurrency trading, but according to Guto Antunes, head of digital assets at Itau, the bank plans to expand its offering to other digital assets in the future. „It starts with bitcoin, but our overarching strategic plan is to expand to other crypto assets in the future,“ said Antunes, who also added that the potential expansion of available crypto asset offerings will depend on the evolution of crypto regulation in the country.

Itau aims to compete with local players in the cryptocurrency sector, such as crypto exchange MB or Mynt, a company under investment bank BTG Pactual, as well as international giants such as Binance. One of the distinctive features that Itau seeks to leverage is its role as a custodian, which provides a high level of security for users' assets. According to the head of digital assets at Itau, it is their company that will stand out from competitors as it also acts as a custodian that protects the assets of its users.

## Inflation in the US Continues to Decline

The Consumer Price Index (CPI) was flat in November 2023 compared to the previous month but rose 3.1% year-on-year. Year-on-year inflation as measured by the US CPI was in line with analysts' expectations in November.

The Consumer Price Index, which measures the prices of a basket of commonly used consumer goods and services, rose 3.1% year-on-year in November, according to seasonally adjusted data from the Labor Department. The year-on-year inflation rate was the lowest in two years but still remains above the Fed's 2% target.

The fall in inflation is a hopeful sign that the policy of raising interest rates in the US has been effective and potentially signals the Federal Reserve (Fed) to stop raising interest rates. Fed officials have even admitted to a series of interest rate cuts that could begin as early as the first half of 2024.

## Argentina Has a Pro-Bitcoin President

The people of the South American nation of Argentina, which has a population of more than 45 million, have elected Javier Milei, a pro-bitcoin and far-right populist, as their new president in the 2023 presidential election. Argentina's new president, who has long been known and celebrated for his critical stance towards central banks, won the second round of the presidential election with 55% of the vote.

According to the media, the election results reflect a significant political shift in Argentina, which is strongly influenced by Milei's strong opposition to the central bank, which he describes as a „fraud“ and a tool of politicians to collect inflationary taxes from the population. His views grew in popularity during Argentina's inflation crisis, where the Argentine peso experienced year-on-year inflation of more than 140%.

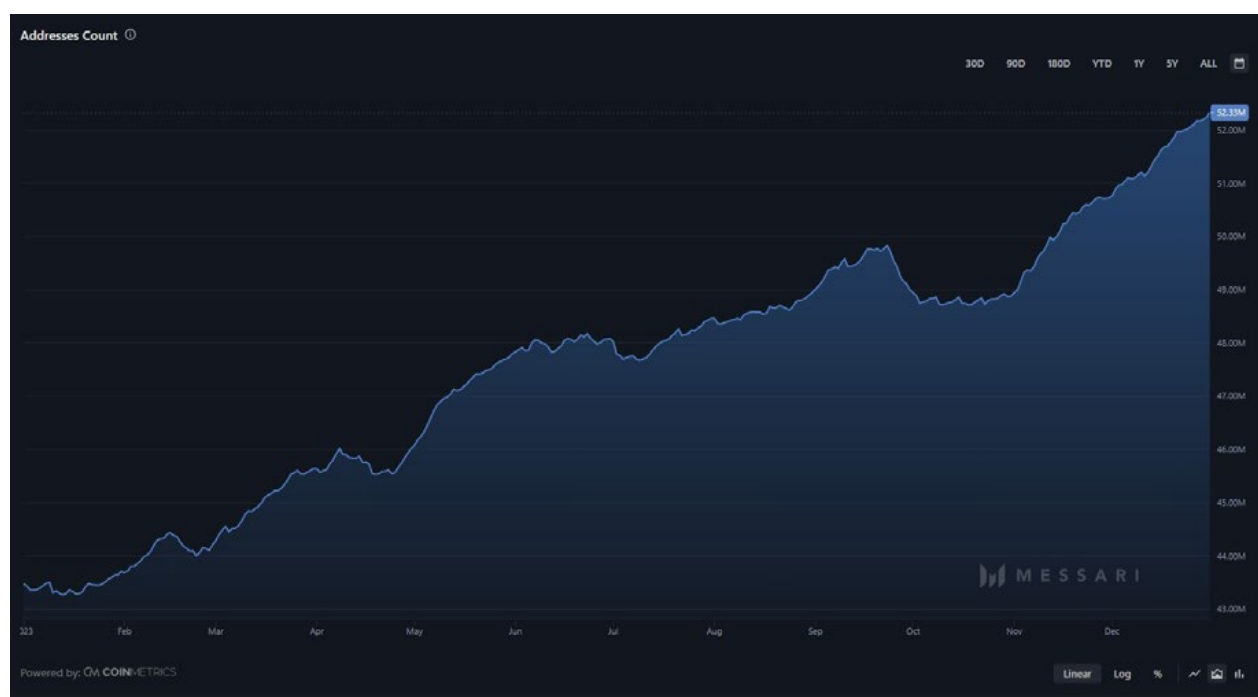
The victory of the new president is a very positive signal not only for the people but also for Bitcoin and cryptocurrencies. The president-elect has been a long-time supporter of Bitcoin and sees Bitcoin as the key to Argentina's economic recovery while advocating the return of monetary control to the private sector. However, it is important to add that shortly after his victory, Milei did not communicate any future adoption of BTC in the country, but he did present his plans for the dollarization of Argentina.

The contrast between Milei and his opponent Sergio Massa in the election campaign was drastic. Massa proposed the launch of a central bank digital currency (CBDC) to combat Argentina's inflationary crisis, while pointing out different economic philosophies across the country's political spectrum. On the other hand, Milei presented a radical departure from traditional economic policies. At one of his pre-election meetings, he vowed to close the central bank, replace the Argentine peso with the US dollar, and embrace the adoption of decentralized finance. His approach has also been referred to as „*economic shock therapy*“, signaling a drastic shift away from Argentina's current monetary strategy.

Whether Argentina will accept Bitcoin as legal tender in the future due to the high inflation of its domestic currency is still questionable. However, its stance could potentially lead the country to at least hold Bitcoin as a reserve asset, following the example of El Salvador. However, integrating Bitcoin into the Argentine economy could foster a more decentralized, inflation-proof financial system, which could ultimately have a positive impact on the value of Bitcoin itself.

# ON-CHAIN DATA - BITCOIN

## BTC - Addresses Count



Source: Messari

The total number of addresses on the Bitcoin network has grown significantly over the past year. As we can see in the chart, the improved sentiment in the cryptocurrency market has had a very positive impact on the influx of new users. Indeed, in January 2023, the total number of addresses in the Bitcoin network stood at 43.48 million, while by the end of 2023, the total number of addresses in the Bitcoin network was already 52.33 million. Thus, the total number of addresses increased by up to 20% during 2023. The largest bitcoin address today is the [cold storage address of the crypto exchange Binance](#), which currently holds up to 248,597 bitcoins worth more than \$10 billion.

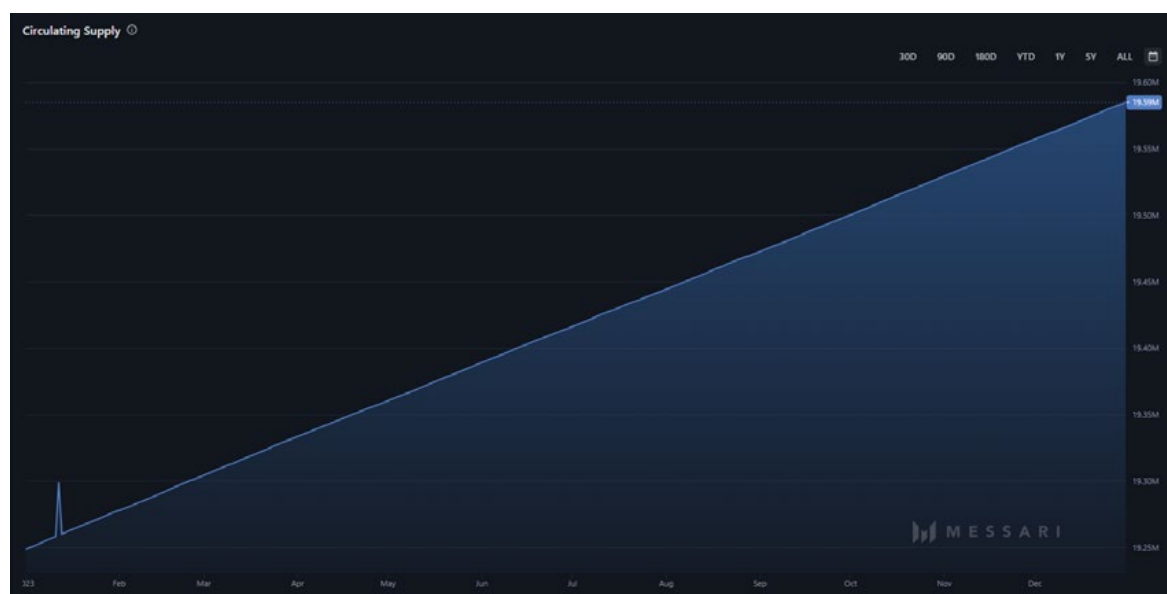
## BTC - Addresses With a Balance Greater Than 1 BTC



Source: Messari

The number of addresses with a balance of more than 1 BTC (roughly \$42 thousand) has continued to grow over the past year. The number of such addresses grew by over 5% from 978,000 addresses to 1.02 million addresses. The upward trend in this metric indicates the growth of so-called „wholecoin“ investors, that is, investors who own at least one whole bitcoin. It should be added, however, that this metric does not account for investors who hold their BTC on exchanges, which means that there is a high probability that there are many more investors who own one whole bitcoin.

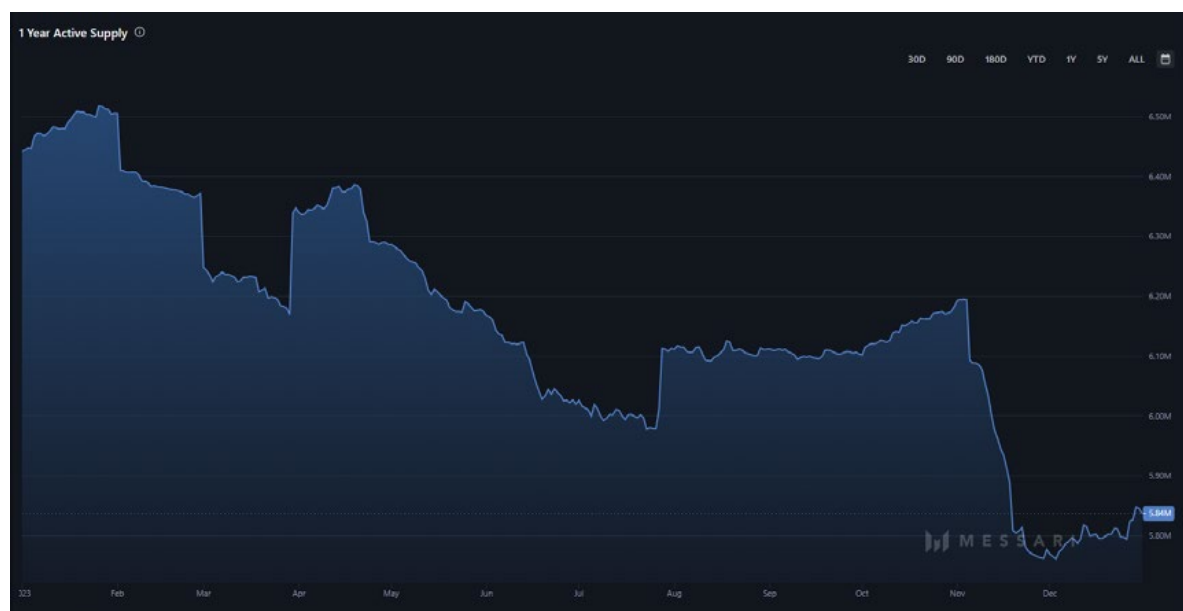
## BTC - Circulating Supply



Source: Messari

The total amount of bitcoins in circulation increased by 1.75% from 19.25 million to 19.59 million bitcoins during 2023. More than 93% of all bitcoins that will ever enter circulation are currently in circulation, given that the bitcoin supply is fixed at a maximum of 21 million bitcoins. During 2023, roughly 340 thousand new bitcoins were put into circulation by mining. In 2024, however, the Bitcoin network expects halving, during which the block reward will be reduced from 6.25 BTC to 3.125 BTC and inflation in the Bitcoin network will be halved. Halving is estimated to take place in April 2024.

## BTC - 1 Year Active Supply



Source: Messari

The number of active bitcoins that have been part of any transaction has dropped by over 9% over the past year, from an initial 6.4 million BTC to the current 5.84 million. In practice, this means that more and more bitcoins remain idle on the wallets of their owners. Investors are thus still not committed to divesting their assets at current prices. In some cases, BTC inactivity also means the potential loss of private keys and therefore the loss of access to their assets.

## BTC - Balance on Exchanges



Source: Coinglass

The amount of bitcoins held in exchange wallets continued to trend downwards during 2023. Several factors contributed to this, such as the crash of the FTX crypto exchange in late 2022, which motivated many investors to move their assets to private wallets from other exchanges as well. Currently, there are roughly 1.88 million BTC on exchanges, down roughly 2% from early 2023.

## BTC - Average Transaction Fees



Source: Messari

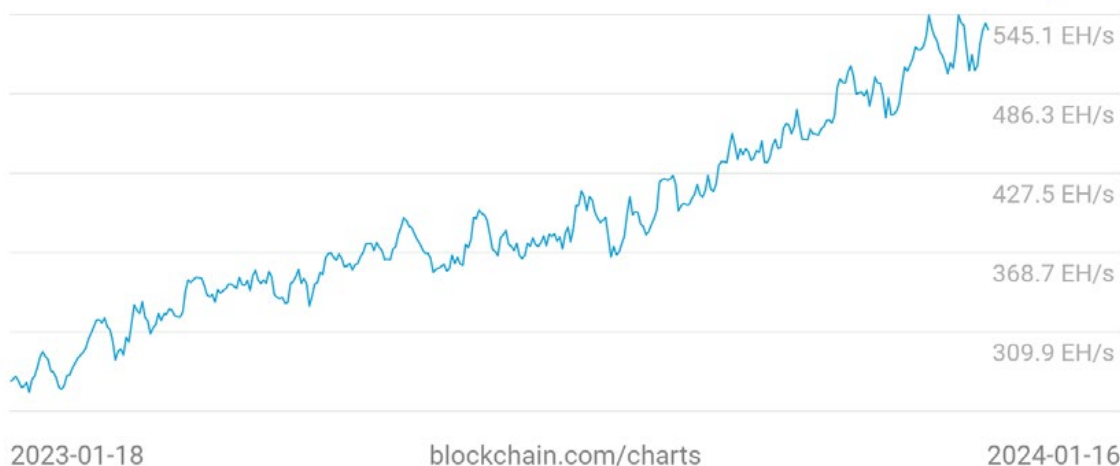
The average transaction fee on the Bitcoin network was around \$15 to \$20 at the end of the calendar year. Fees on the Bitcoin network increased significantly, particularly in the last quarter, when this growth was related to the Bitcoin inscriptions known as Bitcoin Ordinals.

Many users began to create NFTs on the Bitcoin network through injections, clogging up block space and paying exorbitant transaction fees on the Bitcoin network, which at one point climbed to as much as \$40 per transaction. Of course, users who had nothing to do with the injections and wanted to perform simple BTC transfers also suffered from the high fees. However, miners were incentivized to prioritize transactions with higher fees into blocks, which often led to situations where transactions with a fee of \$2-3 were waiting for several days to be included into the block.

## BTC - Hashrate

Hash Rate

533.8 EH/s



Source: [Blockchain.com](https://blockchain.com)

The total computing power of the network that powers the Bitcoin network has increased by over 100% since the beginning of 2023 to a year-end level of 507 EH/s. Higher hashrate means more diversity and competition for miners, which is healthier for the entire industry. Computing power reached an all-time high (the so-called All-Time High) on 25 December at up to 544 EH/s. The more hashing (computing) power a network has, the greater its security and its overall resilience to attack. This means that the Bitcoin network becomes more and more secure and resilient as time goes on.

## BTC - Fear & Greed Index



Source: [Alternative.me](https://www.alternative.me)

The Fear & Greed Index has been in the 30 to 70 point range for most of calendar year 2023, representing an area of moderate fear to greed in the market. By the end of 2023, with the rise in the BTC price, the index has risen above 70 points for the first time in a long period, which in practice means greed tending towards strong greed (above 75 points). The end of the calendar year ended with Bitcoin in the greed band with a score of 67 out of 100.

## ON-CHAIN DATA - ETHEREUM

### ETH - Active Addresses Count

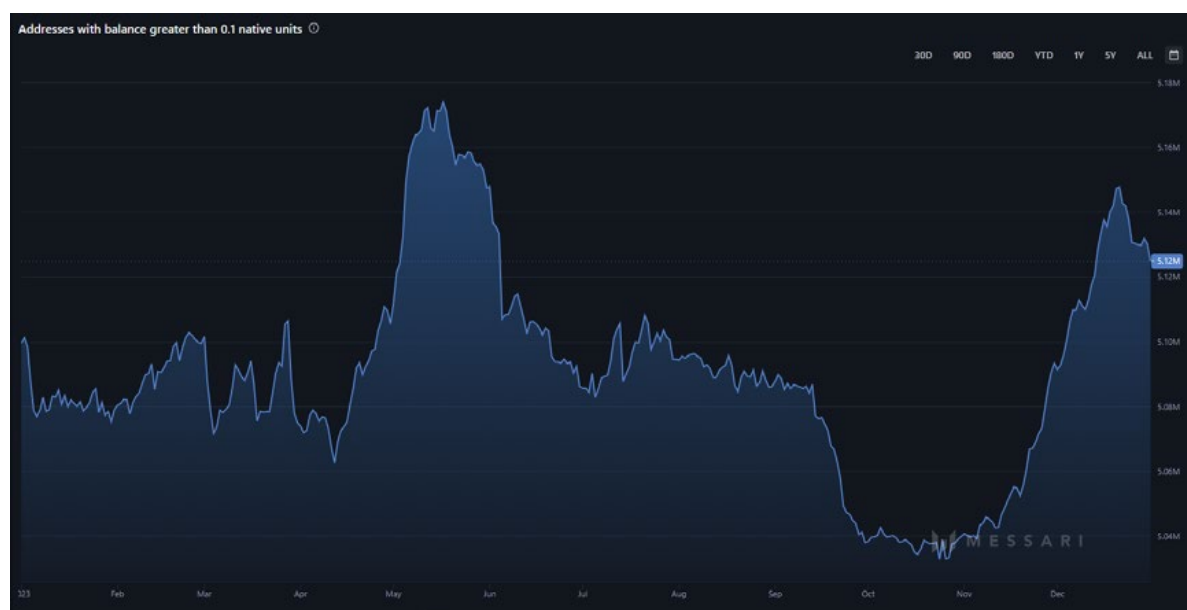


Source: Messari

The number of active addresses on the Ethereum network during 2023 was mostly in the range of 400 - 700 thousand. However, as we can see from the chart, the number of active addresses tends to increase significantly at certain moments. For example, we can see a significant increase in the number of active addresses in September, when the number of active addresses rose to 1.15 million on September 15. These occasional spikes in activity are related, for example, to the launch of the new DeFi app or to announcements of so-called airdrops, where users interact with various (usually new) protocols in order to obtain free tokens.

Users try to obtain airdrops and thus develop activity on a given network or decentralized application in order to obtain this airdrop. The more airdrops they have, the greater their chances of success.

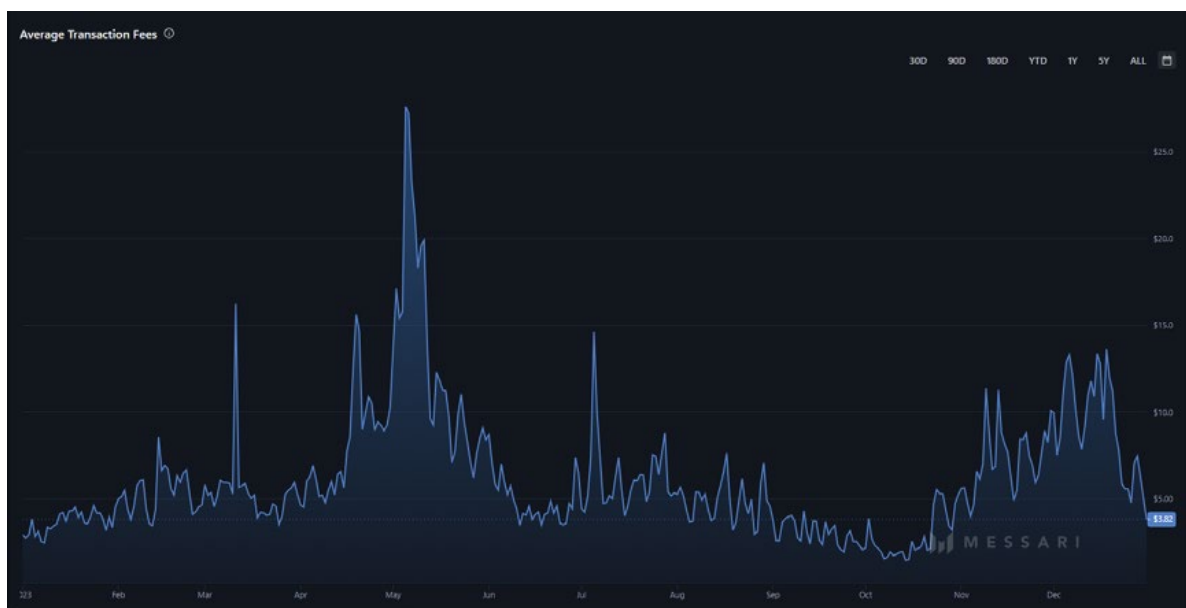
## ETH - Addresses with Balance Greater Than 0.1 ETH



Source: Messari

The number of addresses holding at least 0.1 ETH (more than \$200) exceeded 5.12 million at the end of the year. A significant increase in addresses with a balance of more than 0.1 ETH was seen around November and December, just around the time that several companies, including BlackRock, the world's largest institutional asset manager, filed applications with the U.S. Securities and Exchange Commission (SEC) for the planned launch of a spot ETF for Ethereum.

## ETH - Average Transaction Fees



Source: Messari

Average transaction fees on the Ethereum network during 2023 were mostly in the \$4-10 range. However, there have been some significant fluctuations in transaction fees during 2023, with the most significant increase in fees seen in early May. The average transaction fee rose to \$27 on May 5, with this increase linked to the huge euphoria surrounding the PEPE cryptocurrency.

Pepe coin (PEPE) is a frog-themed token that has gained huge popularity in the crypto sector, rising thousands of percent in just a few days in early May. This attracted considerable attention from investors who wanted to make money from this cryptocurrency. However, it should be noted that this increase in fees was only short-lived and within a few days the fees went back down to the \$4 to \$10 level.

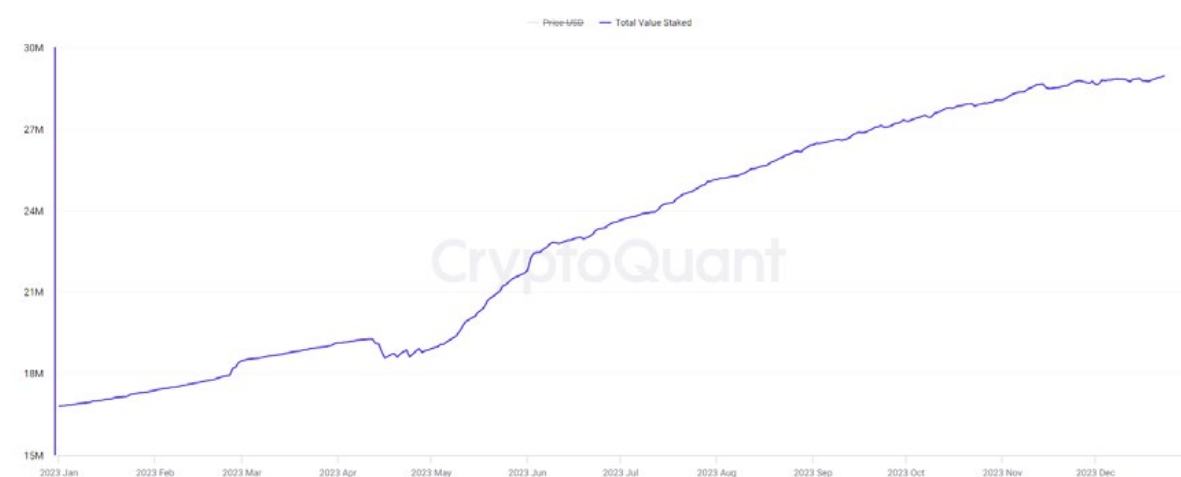
## ETH - Circulating Supply



Source: Messari

The Ethereum network, following the London update in 2021, launched the EIP-1559 mechanism, the main benefit of which was changes to the policy for determining fees in Ethereum transactions. With this enhancement, a portion of the fees is burned in each transaction, effectively reducing the circulating stock of ETH. During 2023, the Ethereum stockpile decreased by -0.3% from 120.58 million ETH to 120.18 million ETH. Thus, Ethereum continued its deflationary policy in 2023.

## ETH - Total ETH Staked

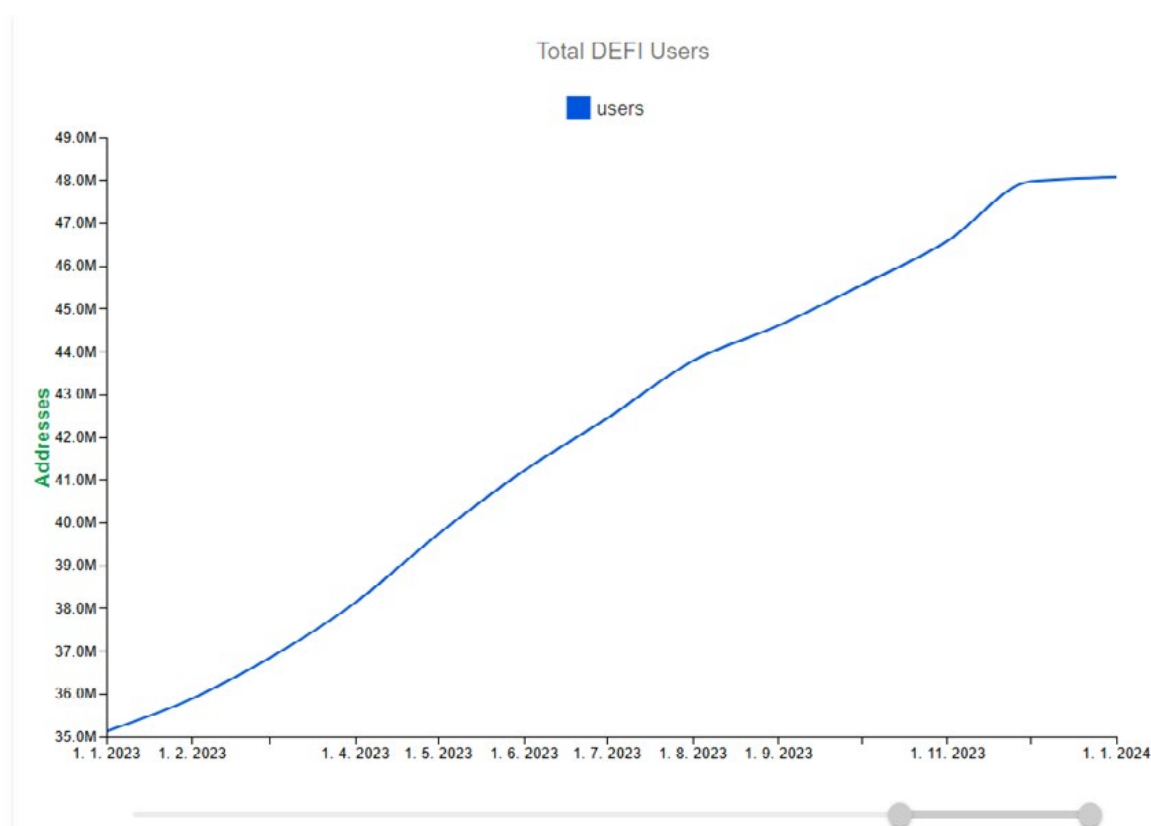


Source: Etherscan

According to data from analytics platform CryptoQuant, nearly 29 million ETH are currently staked on the Ethereum network, representing roughly 24% of the total circulating stock of Ether. This is a significant increase from early 2023, where just over 16.8 million ethers were staked as of January 1. ETH staking requires the insertion of 32 ethers to run a validation node. However, there are also alternatives through centralized exchanges or liquid staking protocols that allow users to stake ETH from as little as 0.01 ETH.

# DEFI RETROSPECTIVE

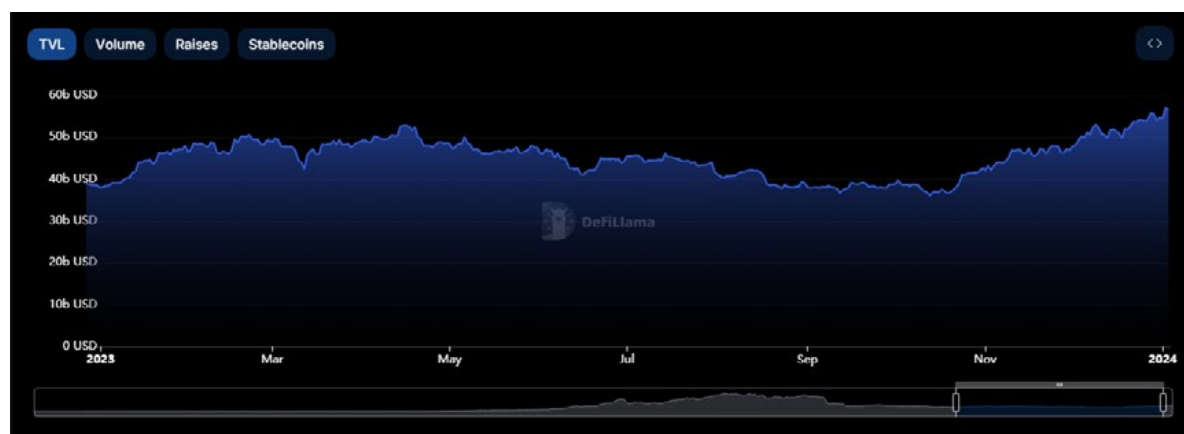
## Number of DeFi Apps Users



Source: *Cryptobeholder*

The DeFi sector continues to be one of the most popular and sought-after ways to interact in the cryptocurrency ecosystem. Based on data from Cryptobeholder's „Total DEFI Users“ metric, the DeFi sector added up to 13 million new users interacting with the DeFi world during 2023. Over the past year, after a very weak 2022, the sector has started to show signs of recovery again, but this is also related to the increased interest in Bitcoin and alternative cryptocurrencies. However, DeFi nowadays offers a huge number of options and innovative services, so it should come as no surprise that this field is gradually expanding among more and more users.

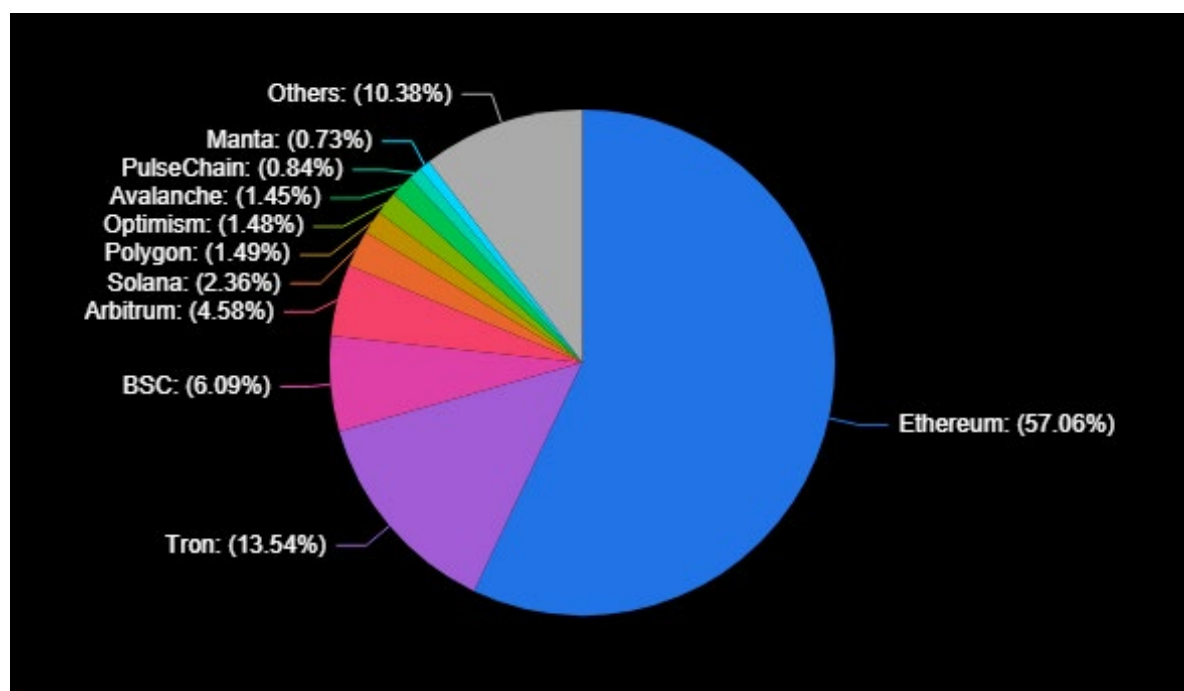
## DeFi - Total Value Locked (TVL)



Source: DeFiLlama

The total value placed in the DeFi sector was approximately \$38 billion at the beginning of 2023. During the year, Total Value Locked (TVL) in DeFi grew by more than 42% and stood at \$54 billion at year-end. Popular applications in 2023 were protocols focused on liquid staking, as well as lending protocols or decentralized exchanges.

## TVL by Chains



Source: DeFiLlama

According to the DeFiLlama portal, more than 200 networks are currently in operation, including Layer 2 (L2) scaling projects that provide users with access to a variety of DeFi services and applications. In terms of the top 10 networks (blockchains) in the DeFi space, we can see that Ethereum still firmly holds its market dominance in the total locked value (TVL) metric. There are currently more than \$32.8 billion in total assets locked up on the Ethereum network, according to available information. The second largest network is the Tron network, with a total locked value of \$7.2 billion. Rounding out the top three is the Binance Smart Chain (BSC) network, with a locked-in value of \$3.4 billion.

Of the second-layer solutions built on top of the Ethereum network, Arbitrum is currently the largest, with up to 526 different protocols operating on the network, with a total locked-in value of \$2.45 billion. The largest protocol on the Arbitrum network is the decentralized exchange GMX with a locked value of \$547 million.

It is also worth mentioning the Optimism network, whose locked-in value grew by over 80% during 2023 and currently stands at nearly \$900 million. The largest protocol on Optimism is Synthetix, a platform focused on creating synthetic assets and derivatives on the blockchain.

## The Most Popular DeFi Apps

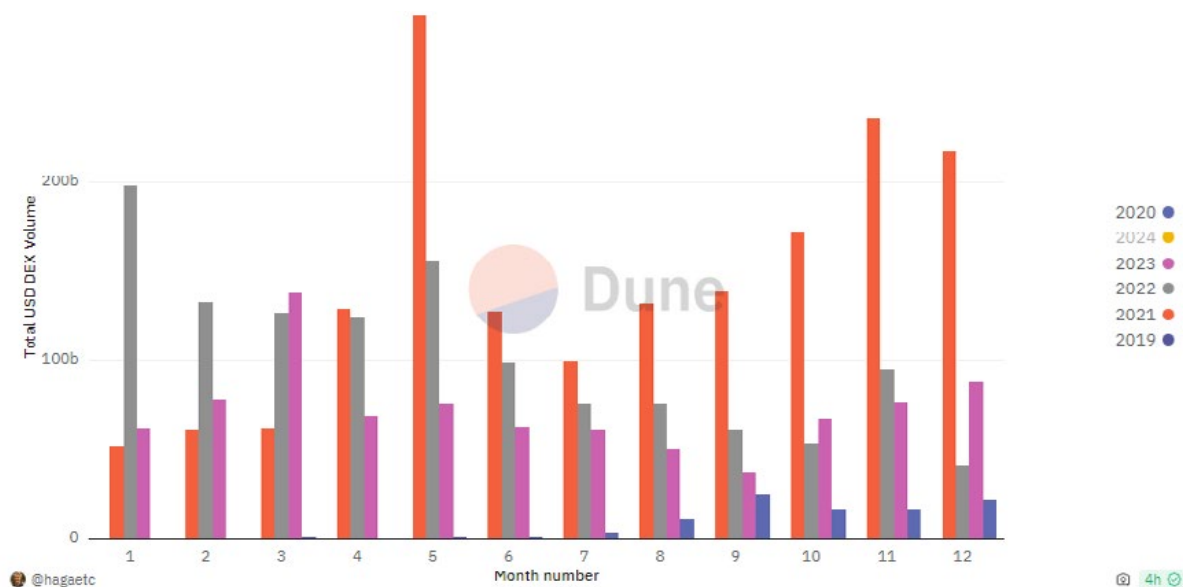
The largest application in the DeFi sector in terms of locked-in value at the end of the calendar year was the Lido Protocol, aimed at providing so-called liquid staking services. For this staking, users cash in so-called liquidity provider tokens, which they can further use in other DeFi applications such as Curve and receive additional revenue. There are currently more than \$22 billion worth of assets locked up on the protocol, according to the DefiLlama platform, making it the largest DeFi app and far ahead of its competitors. Lido currently operates on the Ethereum, Solana, Moonbeam, Moonriver and Terra Classic blockchains.

The second largest protocol is MakerDAO, which allows users to mint one of the most widely used decentralized stablecoins, DAI. MakerDAO is often referred to as a sort of digital bank of the future. The total locked-in value on this protocol is currently \$8.28 billion, while the market capitalization of the DAI stablecoin is at \$5.3 billion.

Rounding out the top three DeFi apps is Aave, a protocol focused on decentralized lending on the blockchain, with more than \$7 billion currently allocated.

## The Most Popular Decentralized Exchanges by Volume Traded

**The volume on decentralized exchanges in selected years**



Source: Dune Analytics

Over the past few years, the popularity of so-called decentralized exchanges (DEXs) has been growing, which have gained popularity among a large number of investors, mainly due to their decentralized nature. In particular, 2021 was considered the year of DeFi, as trading volumes on decentralized exchanges in particular increased several-fold during that year. After the collapse of the Terra platform and the FTX crypto exchange, it took the market months to recover from these unfortunate events.

However, 2023 has started very positively for decentralized exchanges, as investors have shown a renewed and growing interest in interacting with decentralized exchanges since the beginning of the year. In 2023, more than \$860 billion was traded on decentralized exchanges, indicating a growing adoption of the use of these types of exchanges.

Among the individual decentralized exchanges, the Uniswap market dominates the market, where, according to statistics, up to 54-56% of the total volume of trades carried out on all DEX exchanges is carried out. The second most used exchange in terms of trading volume is PancakeSwap with a share of 16-18%.

## Protocol Analysis - Arbitrum

Arbitrum is a second-layer scaling solution built on top of the Ethereum blockchain that enables faster transactions at lower transaction costs.

Layer 2 solutions improve the scalability of the underlying blockchain (layer 1) by delegating complex computational tasks such as transaction processing and data storage to the second chain. Arbitrum solves the problems of the Ethereum blockchain by transferring transaction files outside the Ethereum network and then verifying them faster and cheaper at the secondary layer. These files are called rollups and are also referred to as technology used by Arbitrum.



Source: Defillama

As of year-end 2023, there were \$2.45 billion in assets locked up in the Arbitrum network, with the Arbitrum network seeing up to 145% growth in the total locked-up value (TVL) metric during 2023.

Arbitrum is currently the fourth largest ecosystem in the DeFi sector with a market share of 4.8%, with several hundred thousand users interacting with the Arbitrum network daily in 2023. Activity grew particularly in the second half of 2023 when the number of active addresses was almost constantly in the range of 500 thousand to 1.3 million addresses per day.

The largest application on the Arbitrum network is GMX with a total locked-in value of \$547 million. GMX is a decentralized spot and perpetual exchange that allows users to trade cryptocurrencies like Bitcoin or Ethereum directly from their crypto wallets. In addition to the fact that users can swap (exchange) different cryptocurrencies with each other on this exchange, it is also possible to trade so-called perpetual futures (futures contracts without expiration) on GMX with up to 50 times leverage.

Leveraged trading is mostly associated with centralized exchanges, but GMX allows this kind of trading in a decentralized manner, directly from its crypto wallets without the need to interact with an exchange. GMX aims to provide users with the ideal user experience for low-fee, zero-price impact trades.

## Hacks in the DeFi Sector

The crypto industry has continuously encountered problems over the years related to hacking and misuse of protocols. And while 2023 was no exception, it did yield one very positive report: hack volumes dropped by more than 50% year-on-year.

According to TRM Labs, the volume of cryptocurrencies stolen by hackers in 2023 is estimated to be around \$1.7 billion, less than half of the \$4 billion stolen in 2022. Despite the decline in overall losses, large sums of money are still being stolen from individual crypto projects. In the following paragraphs, we bring you an overview of the three biggest hacks in the crypto world in 2023.

### Mixin Network - \$200 million

Mixin Network, a Hong Kong-based crypto project, was the biggest hack of 2023. On Saturday, September 23, the company had to abruptly shut down its operations after hackers stole a staggering \$200 million from the wallets of the platform's users.

Mixin announced at the time that „his cloud service provider's database was attacked by hackers.“ Although the company did not provide any further explanation, it is believed among analysts that the database in question may have held private keys to users' accounts.

### Euler Finance - \$197 million

In March 2023, as much as \$197 million in cryptocurrencies were stolen from the Euler Finance platform in a strange way. According to available information, a hacker exploited a vulnerability in this lending protocol by manipulating the exchange rates between stablecoins issued by Euler - specifically eDAI and dDAI. By repeatedly using the „*donateToReserves*“ function, the attacker was able to influence the exchange rate between eDAI/dDAI stablecoins via the DAI stablecoin.

The attacker subsequently managed to disrupt the balance of the liquidity pools that held the two tokens through a flash loan that is payable within the same Ethereum transaction. This triggered a cascading liquidation of borrowers' dDAI-denominated positions.

However, this hack is one of the few hacks that had a happy ending. After some time, the attacker decided to return the stolen funds. Almost all of the funds, except for a small reward for the so-called „*White Hat*“ hacker, were returned to the developers, who then returned them to the users themselves.

### Multichain - \$125 million

In July, a crypto bridge connecting multiple blockchains (Cross-Chain Bridge) called Multichain fell victim to hackers, with hackers managing to steal up to \$125 million in cryptocurrency from it across the various blockchains it supported.

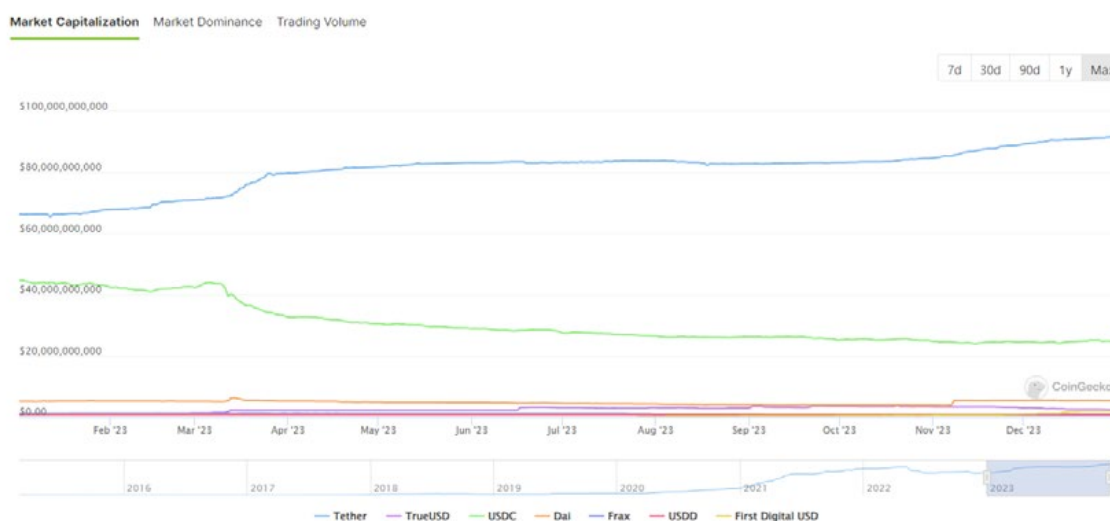
The exact cause of the hack remains unclear to this day, as no information has yet been made public that would accurately define the origin of the problem. However, security firm Halborn has said that a bug in the code, which hackers exploited to compromise the private keys of smart contracts, appears to be a likely factor in the failure.

In addition, there have been speculations that the team responsible for the Multichain project may have been responsible for the incident, as its founder, known as Zhaojun He, mysteriously disappeared shortly before the hack.

According to available information, Zhaojun He was arrested just before the incident by Chinese authorities, and it was revealed that Zhaojun had exclusive control over the protocol resources, contradicting Multichain's previous claims of decentralization. This bridge was eventually shut down completely and is still considered non-functional to this day.

# STABLECOINS

## Stablecoins Overview



Source: Coingecko

The year 2023 was a successful year for stablecoin adoption from our perspective. The largest stablecoin on the market in terms of market capitalization continues to be the USD Tether stablecoin (USDT), whose market capitalization reached \$94 billion at the end of the year. During 2023, Tether’s capitalization grew by as much as 42%, as its capitalization was still around the \$66 billion level at the beginning of 2023.

The second-largest stablecoin, USDC, fared slightly worse over the past year, with its market capitalization falling by over 40% from \$44 billion to \$24 billion during 2023. The main reason for the massive drop in the market capitalization of the USDC stablecoin was the closure of a US bank called Silicon Valley Bank, which was an important partner of Circle, the company behind the USDC stablecoin issue. The bank went into insolvency and Circle had USD 3,3 billion in reserves with the bank, which caused a depeg (deviation from a dollar peg) and huge uncertainty. Although Circle later regained control of these funds after SVB received federal assistance, there remained tension and uncertainty among investors, many of whom chose to convert their USDCs into other stablecoins.

The third largest stablecoin on the market remains the crypto-collateralized stablecoin DAI, whose market capitalization at the end of the year was above \$5 billion.

Among the top 5 stablecoins on the market in 2023 is the stablecoin First Digital Dollar (FDUSD), which was only introduced in June 2023. It is a reserve-backed stablecoin issued by a subsidiary of the Hong Kong-based financial services company First Digital Limited. FDUSD periodically provides a report known as a „reserve confirmation“ audited by independent auditors to demonstrate that FDUSD is fully backed by an equivalent value of cash or cash equivalents. Its market capitalization has grown to \$1.8 billion in just a few months of operation.

## USDT - Freezing of Funds Related to Criminal Activity

In November, the issuer of USDT Tether, the largest USDT stablecoin, and crypto exchange OKX collaborated with the US Department of Justice (DOJ) to freeze approximately USDT 225 million linked to international human trafficking in Southeast Asia, according to disclosures.

The investigation was conducted using a blockchain analysis tool from Chainalysis to identify wallets used in a large-scale scam called „pig butchering“ that targets victims around the world.

Pig butchering is a type of online scam where the scammer pretends to be interested in a romantic relationship. Scammers spend time building trust with the other party, then after weeks or months of communication, ask their victim for money, often under the guise of a fabricated story or a unique investment opportunity.

The freezing of illegally obtained funds was revealed through the analysis of the flow of funds on the blockchain. The frozen wallets are located on the secondary market and are not directly linked to Tether customers.

## Stablecoin USDC Expands on Arbitrum Network

Circle recently announced plans to launch a new native version of its USD Coin (USDC) stablecoin on the Arbitrum network. According to information available from a blog post, Circle will replace the existing version of USD Coin running on the Ethereum network, which has so far been bridged to the Arbitrum network, directly with a native USDC token created on the Arbitrum network.

The goal of this effort, according to Circle, is to speed up transactions using protocols referred to as cross-chain transfer protocols (CCTPs). CCTPs are protocols that handle the transfer of assets between blockchains and allow users to consolidate liquidity.

## FUMBI IN 2023

### Advanced Portfolios

At the end of February, we introduced a new product - [Advanced Portfolios](#), which gave our clients the opportunity to create their own diversified investment portfolios consisting of new and more exotic cryptocurrencies. The goal of this product is to provide our clients with greater freedom and flexibility to select and purchase cryptoassets that are consistent with their own preferences and investment strategies.

With this new feature, clients have the ability to build their portfolios with variable ratios for individual assets but also have access to investment templates created by the Fumbi team. These templates focus on different areas and ecosystems within the cryptocurrency world, giving our clients a wide range of options to choose from.

Creating your own investment portfolio has several advantages. First, it allows you to tailor your investments based on your own preferences. For example, you can choose to invest in potentially fast-growing assets if you want to maximize your returns, or in more conservative assets if you're looking for stability.

There are currently more than 60 cryptocurrencies available to choose from in the Advanced Portfolios. From these cryptocurrencies, anyone can build portfolios with assets and ratios to suit their own preferences.

### Automatic Deposit

At the beginning of February, we introduced to our clients a new functionality called Automatic Deposit. This is a functionality that allows you to regularly invest a fixed amount of money in a specific asset, in this case, a cryptocurrency or a portfolio of cryptocurrencies. This way you spread your investment over time and reduce the risk of buying at the wrong time. This method works by averaging entry prices over time, reducing the impact of market volatility.

If you are interested in trying out regular cryptocurrency investing via **Automatic Deposit**, you can set it up in Fumbi Credits. With Automatic Deposit via Fumbi Credits, you can automatically invest a fixed amount of money in your desired Fumbi product at regular intervals.

### Gift Voucher

At the beginning of December, we brought another new product to the market in the form of Gift Vouchers. However, Fumbi [Gift Vouchers](#) are not just an ordinary gift. They represent an opportunity for your loved ones to start investing or expand their existing crypto portfolio.

Through Gift Vouchers it is currently possible to invest in four products:

- **[Fumbi Index Portfolio](#)** – A single deposit investment in an entire portfolio of top proven cryptocurrencies. The sophisticated Fumbi Algorithm manages the investment for the client, so they can enjoy the stress-free potential of this fast-growing market.
- **[Staking Portfolio](#)** – An investment in the Staking Portfolio with an expected annual reward of 5 - 7% in cryptocurrencies. There are 10 cryptocurrencies in the portfolio that Fumbi stakes and we credit the reward to the client on a weekly basis. These cryptocurrencies can be more volatile, but with higher risk comes the possibility of higher profit. Read more.
- **[Bitcoin and Gold](#)** – Investment split evenly between Bitcoin and PAX Gold cryptocurrencies with ongoing rebalancing. Leverages the potential of a rapidly growing sector while benefiting from the stability of conservative gold.
- **[Fumbi Credits](#)** – Funds deposited in Fumbi Credits can be used to deposit into any investment product. The client can invest the entire amount at once, or take advantage of periodic investing by setting up automatic deposits over a longer period.

Gift Vouchers are more than just a gift. They are a gateway to the world of cryptocurrencies and investing. With gift vouchers, you have a present for your loved ones whenever it is their birthday, name day or any other occasion.

## We Have Completed a Wallet Audit

As the only crypto-investment company in Slovakia, we regularly undergo an independent inspection of our wallets. The audit is conducted in cooperation with the renowned SGS Slovakia, which is part of the global SGS network.

During 2023, we completed two successful external audits of our wallets, demonstrating that the balance of the wallets where your cryptocurrencies are safely stored matches the values listed in your profiles.

Thanks to independent audits, our users can rest assured that they will always get their cryptocurrencies or money because we have actually bought the cryptocurrencies and stored them safely.

Safety and reliability are very important to us, which is why we make sure that we only work with the best on the market. You can count on the fact that the cryptocurrencies you purchase through Fumbi are directly owned by you and do not appear on our company's balance sheet.

## Quarterly Updates of Our Products

In 2023, we made four quarterly updates to Fumbi products, which included reviewing and updating all of our products so that we can always bring you only the best from the cryptocurrency market. Quarterly updates have been an important part of managing our products and portfolios for a number of years now. They must comply with strict selection criteria and meet all of our formal standards.

As the cryptocurrency market is very dynamic and constantly evolving, it is important to monitor current trends in the cryptocurrency world and optimize our products accordingly.

You can find an overview of each update in the following links:

- [Fumbi Product Portfolio Update - March 2023](#)
- [Fumbi Product Portfolio Update - June 2023](#)
- [Fumbi Product Portfolio Update - September 2023](#)
- [Fumbi Product Portfolio Update - December 2023](#)

## Fumbi Celebrated Fifth Birthday

In early November, Fumbi celebrated its fifth birthday. Fumbi was born in 2018 with a simple idea: to make investing in cryptocurrencies safe and accessible for everyone. Currently, we can boast that our platform has become one of the key players in the cryptocurrency market in Slovakia and the Czech Republic.

**Five years may not seem like a long time, but it certainly is for a crypto startup. Let's take a look at some of the major milestones we've achieved in that time:**

- **130,000 registered users** – the size and number of clients have raised us to the level of a smaller Slovak bank. Of course, we are still planning to grow and preparing for the next bull run.
- **10 crypto products** – 4 of which are for businesses. This year we launched a very successful product - Advanced Portfolios, because both Fumbi and our investors are gaining knowledge and experience that they want to use to create their own crypto portfolios, and this product allows them to do so.
- **6 supported languages** – although we dominate the Slovak and Czech markets, we are trying to bring Fumbi to other customers in Europe. After launching on the Polish and Hungarian markets, we also added Greece this year.

- **4 major awards** – in 2023 we again won the Superbrand award, adding it to our Deloitte - Technology Fast 50 and the Ministry of Economy's Innovative Act of the Year awards.
- **9 successful crypto wallet audits** – we continue to conduct independent audits of crypto wallets to transparently show how we manage and store our clients' cryptocurrencies.

## INVEST IN CRYPTOCURRENCIES WITH FUMBI

Take advantage of the potential of cryptocurrencies and invest with us easily, safely and in just a few clicks. We bring crypto to the general public with a small deposit and in a way that minimizes all possible risks. Since 2018, over 130,000 satisfied clients already rely on us.

**At Fumbi, you can invest in dynamic portfolios or in selected cryptocurrencies with a deposit as low as €50.**

### Fumbi Product Portfolio

- [Fumbi Index Portfolio](#)**  
Our most popular product, the Fumbi Index Portfolio, currently consists of more than 20 top proven cryptocurrencies. It uses a sophisticated Fumbi Algorithm that tracks the growth of the entire cryptocurrency market.
- [Advanced Portfolios](#)**  
Creating portfolios is now much easier. With Advanced Portfolios, you'll have access to over 50 cryptocurrencies and templates created by our team that focus on different areas within the crypto world. Furthermore, you'll be able to build custom portfolios with different ratios of cryptocurrencies that match your investment strategy.
- [Staking Portfolio](#)**  
In the Staking Portfolio, you will find 10 cryptocurrencies that we will stake for you. These cryptocurrencies have a lower market capitalization than bitcoin and therefore can be more volatile. However, with higher risk comes the possibility of higher profits.
- [Fumbi Custom](#)**  
With Fumbi Custom, we bring everyone the opportunity to invest in the cryptocurrency of their choice. Choose your preferred cryptocurrency and invest in it easily, conveniently and safely.
- [Bitcoin and Gold](#)**  
A globally unique product, Bitcoin and Gold tracks the value of Bitcoin and the PAX Gold cryptocurrency, which is backed by real gold. The algorithm splits your finances 50:50. It intelligently buys up the cryptocurrency that has fallen and sells the one that has risen. This combination creates an easy and stress-free way to save for your future.
- [Gift Vouchers](#)**  
With Fumbi Gift Vouchers, you can now surprise and delight your loved ones in a unique way – by gifting cryptocurrencies. Allow them to experience the world of cryptocurrencies and invest in their future.
- [Custody](#)**  
Have you purchased cryptocurrencies and are you wondering how to store them as safely as possible? Take advantage of a first-class cryptocurrency safekeeping option with Fumbi. We work with market leaders to keep your crypto safe at all times.
- [Fumbi Business](#)**  
We bring to legal entities an easy way to increase the value of corporate assets through cryptocurrencies.
- [Employee Programme](#)**  
Through Fumbi, you can bring a unique benefit to your company's employees - they can automatically receive a portion of their paycheck in the form of crypto to their own secure Fumbi account. Your employees choose what portion of their paycheck they will receive as cryptocurrency in the Fumbi Index Portfolio product. Thanks to you, they won't have to make deposits and the amount will be credited to their account automatically every month.

[www.fumbi.network](http://www.fumbi.network)