HASHDEX

## Market Pulse

Q3 2023

**Ecosystem developments impacting crypto's investment case** 





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3. Ecosystem Developments





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### About Hashdex

Founded in 2018, Hashdex is a leading crypto-focused alternative asset manager. We provide innovative investors simple and secure access to the rapidly growing crypto asset class through regulated investment products.







Simple

Secure

Trusted

We exist to bridge the gap between traditional financial markets and the crypto economy.

## **Executive Summary**

In a year where bitcoin (BTC) outperformed traditional asset classes and the wider digital asset space, Q3 marked the first negative quarter for BTC and ether (ETH) in 2023.

The quarter's downturn, observed not just in crypto but broadly, stemmed from a volatile global economic setting, amplified by a sharp negative movement in U.S. interest rates, specially the long end of the curve, unsettling bond and equity markets globally — Q3 saw a 16.1% fall in 10-year US Treasury prices. Such uncertainty left investors unsure about future risk asset trajectories.

Although crypto's performance was negatively impacted by unfounded rumors of SpaceX selling its bitcoin holdings and fears of selling pressure after a court gave FTX the green light to start liquidating digital assets as part of their ongoing bankruptcy process, crypto's fundamental factors suggest that this quarter's performance was a natural market correction after an impressive 1H23.

There were positive aspects to highlight as well: notably, BTC and ETH have demonstrated reduced volatility, signaling the maturation of the crypto market and a shift toward institutional investment rather than retail engagement. A number of partnerships from traditional finance players and crypto initiatives were made in the last quarter, which reaffirms the institutional adoption trend we've been emphasizing throughout 2023.

Also, innovative applications on the Bitcoin network — particularly the use of inscriptions for unique data recording — have enhanced its utility, suggesting a positive trend for BTC's long-term value based on increasing demand and creative applications.

As for ETH, despite positive developments in the Ethereum network, the lack of corresponding price action presents an intriguing opportunity for investors if the price and asset value continue to diverge.

One year after Ethereum's Merge, over 20% of the total ETH supply staked (amounting to \$40 billion) is a strong indicator for our bullish long-term investment stance. It's also worth mentioning that the net deflationary trend for Ethereum and its enhanced scarcity are helping drive an increase in ETH's long-term value.

As we approach the end of the quarter, we acknowledge that the negative close of Q3'23, following a period of significant growth, might be somewhat disheartening. However, we believe that the healthy correction observed is influenced by external factors rather than intrinsic crypto dynamics, and there are numerous fundamental reasons to remain confident in a favorable price performance in the upcoming months.

Throughout this report, we aim to clarify the basis of our optimism, highlighting the encouraging conditions within the crypto market.

SAMIR KORBAGE

Samir Kerbage

Pedro Lapenta

João Marco Cunha PORTFOLIO MANAGER



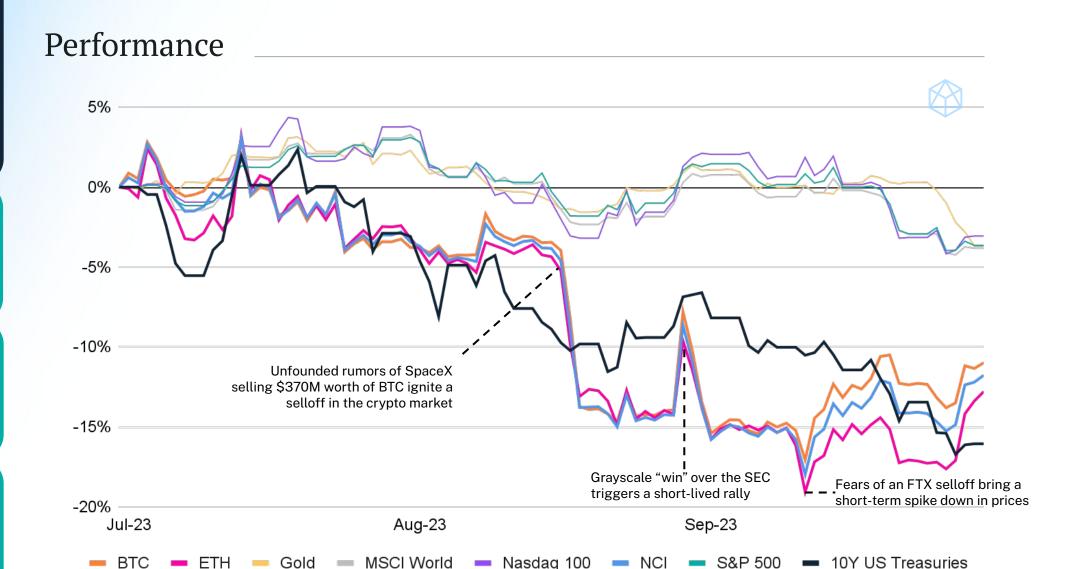


# Market Overview and Global Metrics

- 1. Performance
- 2. Volatility & Correlation
- 3. BTC Dominance & Stablecoins Market

### Quarter features price declines across major asset classes.

This quarter decline was fueled by an uncertain macro environment, triggered by a sharp sell-off in the long end of the US Treasuries curve. Digital assets, after a strong rally year-to-date, went through a correction process until early september. Since then, digital assets price have recovered considerably. We believe crypto fundamentals are indicating that the price movements seen in Q3'23 are simply a healthy correction in a long term secular trend. We remain optimistic for crypto prices in the coming quarters as we witness the opening of the largest financial markets (USA) for institutional investing in crypto through spot bitcoin ETFs approval (expected for 1Q'24).



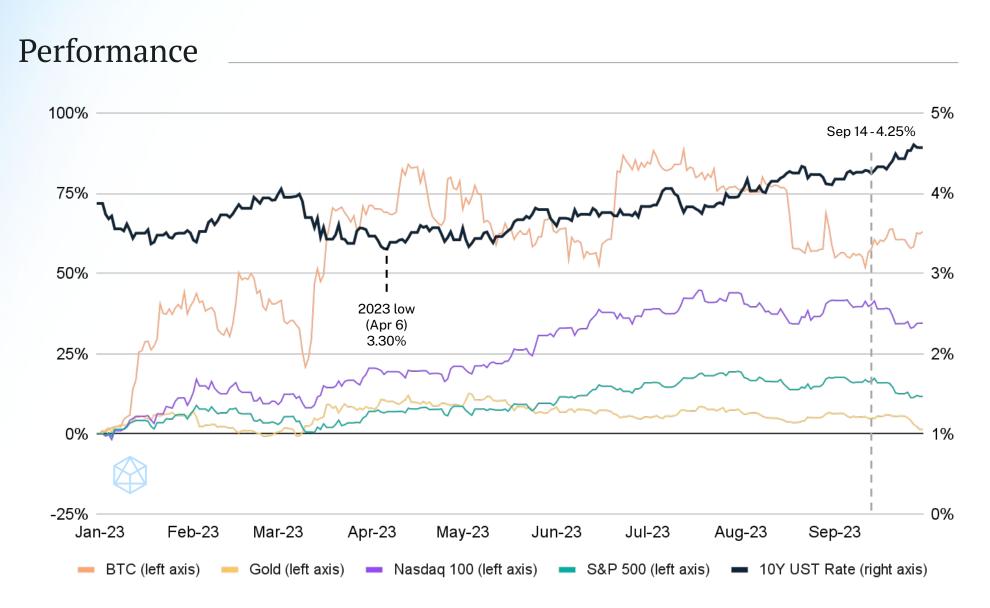
Asset	QoQ	YTD	YoY
ВТС	-11.0%	63.0%	37.3%
NCI	-11.8%	53.7%	31.4%
ETH	-12.8%	39.4%	24.3%
Nasdaq 100	-3.1%	34.5%	34.1%
S&P 500	-3.6%	11.7%	19.6%
MSCI World	-3.8%	9.6%	20.0%
Gold	-3.7%	1.3%	11.3%
10Y US Treasuries	-16.1%	-15.2%	-16.2%

Source: Hashdex Research with data from Bloomberg and CF Benchmarks (from June 30, 2023 to September 30, 2023)

Source: Hashdex Research with data from Bloomberg and CF Benchmarks (from September 30, 2022 to September 30, 2023)

Market Pulse | Q3 2023

### Crypto showed strength since the beginning of the last movement in US 10-year Treasury rates on September 14



Asset	Since Sep 14	Since Apr 6
ETH	2.8%	-10.4%
NCI	2.1%	-6.1%
BTC	1.5%	-3.6%
Gold	-3.3%	-7.9%
MSCI World	-4.3%	2.3%
S&P 500	-4.8%	4.5%
Nasdaq 100	-4.9%	12.7%
10Y US Treasuries	-6.2%	-27.7%

Source: Hashdex Research with data from Bloomberg and CF Benchmarks (from December 31, 2022 to September 30, 2023)

Source: Hashdex Research with data from Bloomberg and CF Benchmarks (from April 6 to September 30, 2023)

Volatility

## A quarter of both "low" and "very low" volatility levels for BTC and ETH

Volatility levels for BTC and ETH have shown signs of maturation for the asset class, as the typical investor profile steadily shifts to be more institutional and less retail-oriented. While past performance is no guarantee of future results, BTC has historically rewarded investors that have allocated to the asset when its volatility is low, as highlighted in our report on BTC volatility.



Source: Hashdex Research with data from CF Benchmarks and Bloomberg (from August 22, 2021 to September 30, 2023). Annualized volatility computed in 30 day windows (working days).

## After a second quarter of decoupling, correlations between BTC and TradFi have gone back up by quarter's end

In the past quarter, BTC correlated more closely with the price movements of risk assets such as global equities and less with traditional safe-haven assets such as gold. Given the possible changes on the outlook for risk assets amid potential shifts in the US economy, it is important to note how this correlation with equities might act as a favorable sign



Source: Hashdex Research with data from CF Benchmarks and Bloomberg (from July 6, 2021 to September 30, 2023). Correlation computed in 3 month rolling windows (working days).

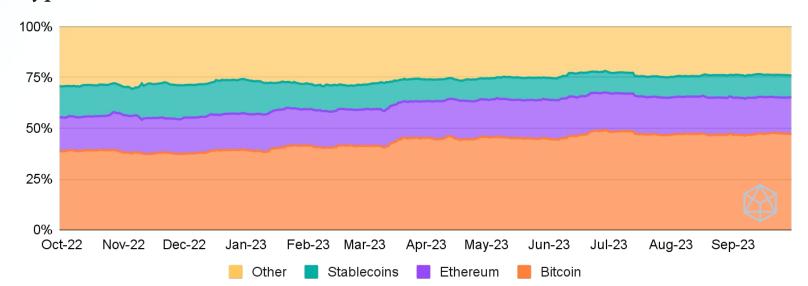


#### Bitcoin dominance stayed sideways after its push toward 50% in the first semester of 2023

BTC dominance stayed relatively steady throughout Q3'23 as overall prices experienced limited fluctuations. However, BTC's dominance has moved from 40% to 50% year to date as bitcoin outperforms. Given the expected approval of a spot BTC ETF in the US, it is expected that BTC dominance will keep going up in the coming months.

#### Crypto Dominance

**Dominance in Crypto** 



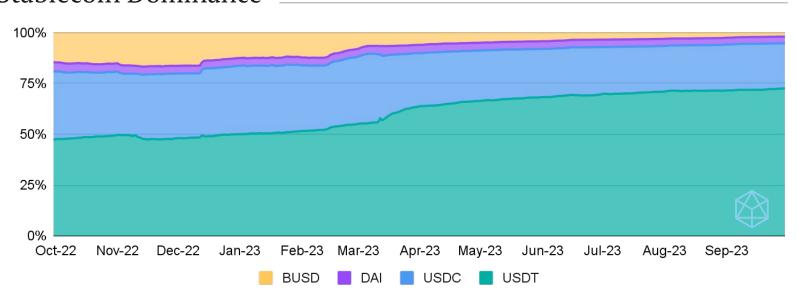
Source: Hashdex Research with data from Messari (from September 30, 2022 to September 30, 2023)

#### USDT's market dominance among the major stablecoins went from 50% to almost 75% in the past 12 months

During Q3'23, it was noticed a sustained trend where the dominance of Tether USD (USDT) continued to grow, a trend seen since the beginning of the year. This concentration is surely a point of concern to be monitored closely, particularly in view of the historical lack of transparency on the reserves backing USDT, which is pivotal for a healthy stablecoin market.

#### Stablecoin Dominance

State of the Stablecoin Market



Source: Hashdex Research with data from Messari (from September 30, 2022 to September 30, 2023).





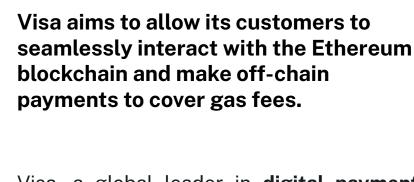
## Institutional Adoption

Notable cases for adoption of blockchain & crypto technology

**Institutional Adoption** 

#### Visa Unveils 'Paymaster': A New Way to Use Visa Cards for Gas Fee Payments





Visa, a global leader in digital payments with a presence in over 200 countries, 263 billion transactions processed annually and 4.2 billion cards worldwide. Their willingness to enhance Ethereum's user experience suggests that Visa is viewing public blockchains as an opportunity to improve its payment businesses, in a sign of strong interest for blockchain technology.

This effort might pave the way for Visa to consider Ethereum as a superior technological platform for their own payment services in the future.

Solana Pay integrates plug-in with Shopify, enabling seamless USDC payments.





Reward systems can be implemented with the introduction of **NFT** loyalty tokens, thanks to Solana integration.

Shopify accounts for 10% of total U.S. e-commerce, contributing to \$444 billion of global economic activity, according to its website. With over 11.5 million active accounts, integrating with a platform like Solana has significant potential.

Starting with a stablecoin wasn't accidental: most merchants would rather be paid with an asset closely tied to the dollar. Also, the average cost per transaction on Solana's blockchain is a fraction of a penny.

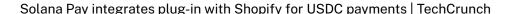


We believe that such low cost could serve as a catalyst for the adoption of crypto payments in a way that has never been seen before.



ethereum

Paying Blockchain Gas Fees with Card | Visa



#### PayPal Launches USD Stablecoin for Digital Payments and Web3 Compatibility



\$20.00 Review and buy 1.00 USD = 1 PYUSD

ethereum

PayPal introduces PYUSD, a 1:1 redeemable stablecoin backed by USD.

The introduction of PayPal's stablecoin, which will have the ability to *interoperate* with other platforms such as Venmo, is a notable example of how important concepts from the Web3 world are beginning influence established to mainstream companies.

We expect to see more similar initiatives in the coming years, which should be very encouraging for consumers.

Google integrates Polygon, Polkadot and 9 other blockchains to its cloud platform









**Google Cloud Platform asserts that its** service retrieves blockchain data faster than accessing it directly from the blockchain itself.

Google's cloud computing division is intensifying its efforts in the blockchain realm by including 11 networks such as Polygon, Optimism and Polkadot in its 'BigQuery' platform for public datasets.

Google claims a significant advantage with this approach, as users may be able to access historical data from an off-chain provider more quickly than querying the blockchain directly. This method can be useful for accessing blockchain data more easily a for a broader audience.





4

Deutsche Bank collabs with Taurus to develop digital asset custody and tokenization services









Deutsche Bank plans to offer digital asset custody services for corporate and institutional clients.

Germany's largest bank, Deutsche Bank, applied for a **crypto custody license** from BaFin in June. Previously, Deutsche Bank **invested in Taurus** as part of a \$65 million Series B round, led by Credit Suisse and involving Arab Bank Switzerland and Pictet Group.

These moves by a major European bank into the crypto space highlights the <u>growing</u> <u>interest that traditional financial giants</u> have in the potential benefits of *cheaper*, *faster*, and more secure transactions, provided by blockchain technology, in the coming years. FedNow adds Dropp, Hedera-based micropayments platform, to their technological stack







Near-instantaneous fund transfers, real-time mortgage payments, and invoice settlements will be made possible.

Dropp's inclusion in the FedNow Service Provider Showcase indicates an <u>increasing interest in distributed</u> <u>ledger technology</u> by the Federal Reserve.

Despite its initial hesitation towards public blockchains and decentralized finance, this move shows the Federal Reserve's endorsement of the technology.

Their recognition of blockchain's potential to enhance operations further signifies institutional backing.





## Ecosystem Developments

- 1. Price action
- 2. BTC & ETH major storylines
- 3. Metrics

### ₿



## After two months of red, bitcoin dodged the "September effect"

The first half of the quarter was relatively uneventful for the leading cryptocurrency in the market. During July and August, BTC displayed lateral price movements—never falling more than 5% over this period. The second part of the quarter was more turbulent, with rumors (unfounded) of potential selloffs conducted by SpaceX and FTX causing negative price fluctuations.

Nevertheless, the quarter ended on a positive note, possibly signaling a resurgence for the coming months. Such optimism can be attributed mainly to market participants increasingly more optimistic about the prospects for a spot bitcoin ETF approval in the US by the SEC.



Source: Hashdex Research with data from CF Benchmarks (from 06/30/2023 to 09/30/2023).

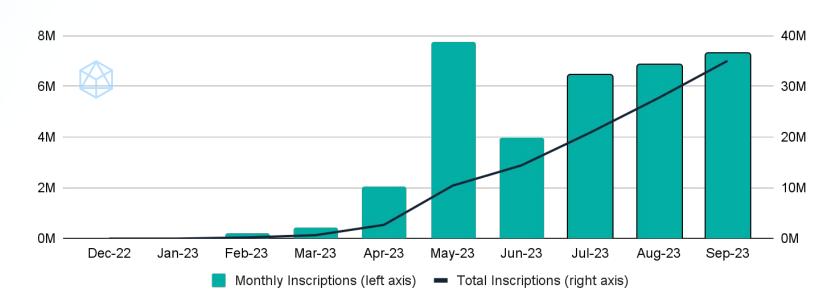


Bitcoin

#### Inscriptions reached 30 million in nine months

After witnessing so many new developments and innovations on Ethereum, it's inspiring to see a fresh and intriguing use case gaining significant traction on the Bitcoin network. The use of inscriptions to record information in a unique manner on the Bitcoin blockchain is a breath of fresh air, and its applications are various. Notably, this movement also has had a positive impact on fees within the Bitcoin network, which contribute to a stronger organic fee market, something we cited as a strong bullish indicator in our last report for Q2'23.

#### Inscriptions over time<sup>2</sup>

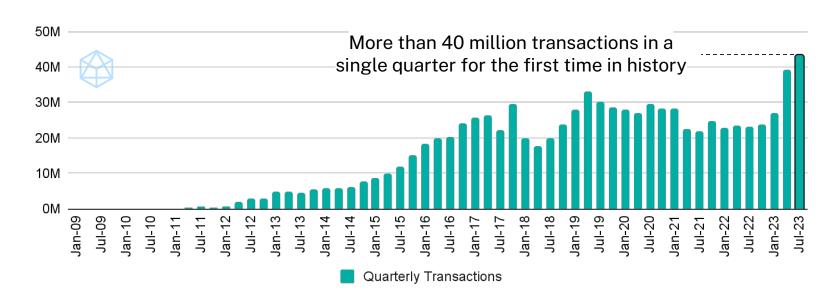


Source: Hashdex Research with data from Dune Analytics (from December 14, 2022 to September 30, 2023).

#### Bitcoin settled more than 40M transactions in a single quarter for the first time since inception

At its core, the long-term value of BTC should primarily depend on the demand for its network utility beyond solely store of value needs. This is why we believe that the rising demand for network usage will likely be a significant factor contributing to BTC's positive performance in the years ahead. Additionally, the creative uses of the network, driven in part by interest in Inscriptions and BRC-20 tokens, further indicate a promising future for the oldest blockchain in the market.

#### Quarterly transactions on Bitcoin<sup>3</sup>





Bitcoin





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#### BTC spot ETF race picking up steam

The US crypto market currently makes it challenging for institutional investors to get exposure to crypto assets in regulated investment products. The current suite of products are less liquid and have higher fees than what investors would have access to in the ETF structure. Pent up demand for a spot BTC ETF could have a significant impact on BTC's price performance when spot bitcoin ETFs are approved, expected for the first quarter of 2024.

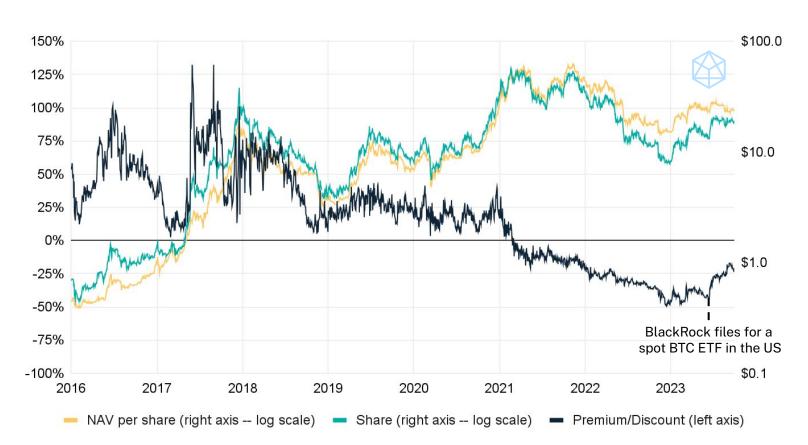
AUM in the spot ETF race

Asset Manager	AUM
BlackRock	\$9.4T
Fidelity	\$4.5T
Invesco	\$1.5T
Franklin Templeton	\$1.4T
Total	\$16.8T

#### Grayscale & GBTC Saga

In August, a federal court overturned the SEC's decision to deny Grayscale's attempt to transition its GBTC into an ETF, in a move that sparked optimism throughout the market suggesting a potential approval of an ETF is on the way. The narrowing GBTC discount over the recent months suggests growing optimism and a higher likelihood of spot ETF approval. However, the specific steps and timeline for this change are still uncertain.

#### GBTC premium/discount

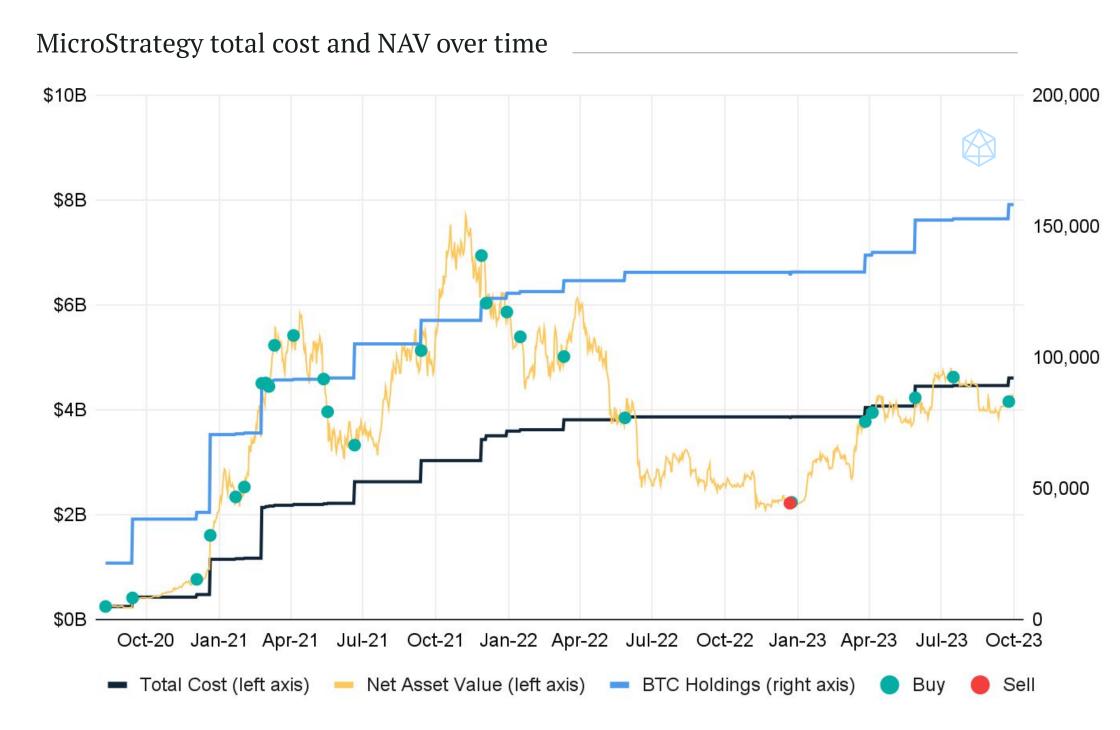


Source: Hashdex Research with data from Grayscale (from January 1, 2016 to September 30, 2023).

## MicroStrategy's BTC treasury philosophy remains unfazed

MicroStrategy (MSTR), a business intelligence software company known for its significant investment in bitcoin and founded by Michael Sayler, bought nearly \$150 million worth of bitcoin (BTC) between August 1 and September 24. Currently, MicroStrategy holds approximately 158,245 BTC, which were acquired with a total purchase price of around \$4.7 billion at an average cost of roughly \$29,582 per bitcoin. In their most recent bitcoin purchase, the company paid approximately \$27,053 per bitcoin.

MicroStrategy, along with other companies, stands to gain from an upcoming change in U.S. accounting rules. The "fair-value accounting" set to start in 2025 means companies won't need to show losses from crypto assets on their balance sheets if the asset prices recover. This change will allow companies to better capture and benefit from the ups and downs of cryptocurrency prices.



Source: Hashdex Research with data from <u>Buy Bitcoin Worldwide</u> and Messari (from August 11, 2020 to September 30, 2023). Dot sizes do not correspond to buy/sell amounts, but rather mark the average date where buys/sells were made.



Bitcoin

Some Bitcoin metrics cooled in Q3'23, as trading volume dropped, but uptrend for its hash rate and active addresses provides a silver-lining



Metric	Q3'23	Q2'23	2022	1Y ago	QoQ	YTD	12M
Price (USD)	\$27,008	\$30,344	\$16,565	\$19,670	-11.0%	63.0%	37.3%
Market Cap (USD)	\$524.7B	\$591.1B	\$319.4B	\$375.5B	-11.2%	64.3%	39.7%
Dominance	47.2%	49.1%	39.5%	38.8%	-3.8%	19.4%	21.6%
24h Exchange Volume (USD)	\$2.8B	\$5.8B	\$4.9B	\$20.6B	-51.5%	-42.8%	-86.3%



Hash Rate (EH/s)	411.5	367.4	277.5	263.8	12.0%	48.3%	56.0%
Active Addresses	1.0M	977.1k	843.1k	988.9k	4.4%	21.0%	3.1%
Daily On-chain Fees (USD)	\$581.2k	\$1.1M	\$201.9k	\$313.8k	-48.5%	187.9%	79.5%
Lightning Capacity (BTC)	4,485.8	5,467.9	4,830.2	4,928.1	-18.0%	-7.1%	-9.0%

#### Ethereum

#### Ether's quarterly performance remained timid despite strong fundamentals and a positive end to September

Throughout Q3'23. there were several improvements for the Ethereum network. We saw interesting developments in a variety of its scaling solutions, experienced the first anniversary of the Merge—a period in which the network experienced year-over-year deflation for the first time—and witnessed staking deposits reach 20% of the total ether supply, indicating an increasing level of security for the network.

All of these factors should, in theory, drive stronger price performance for ETH based on fundamentals. While its price action doesn't back those statements up, we are still confident that the investment case for ether is growing stronger by the day. If the price and the asset's value continue to move in different directions, this could present an interesting opportunity for investors.



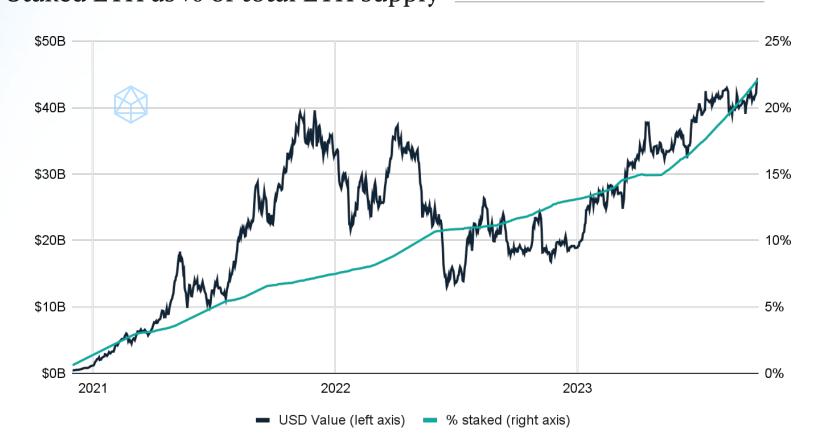
Source: Hashdex Research with data from CF Benchmarks (from 06/30/2023 to 09/30/2023)



#### One year after the Merge: Ethereum's most important update

September 15 marked the first anniversary of "The Merge," Ethereum's transition from Proof-of-Work (PoW) to Proof-of-Stake (PoS). More than 20% of the total ETH supply is now staked, comprising more than \$40 billion in capital locked for security purposes on Ethereum. This substantial staking participation significantly raises the costs of attempting to attack the network, thus making Ethereum increasingly secure over time, a strong bullish indicator for the long-term investment case of ETH.

#### Staked ETH as % of total ETH supply

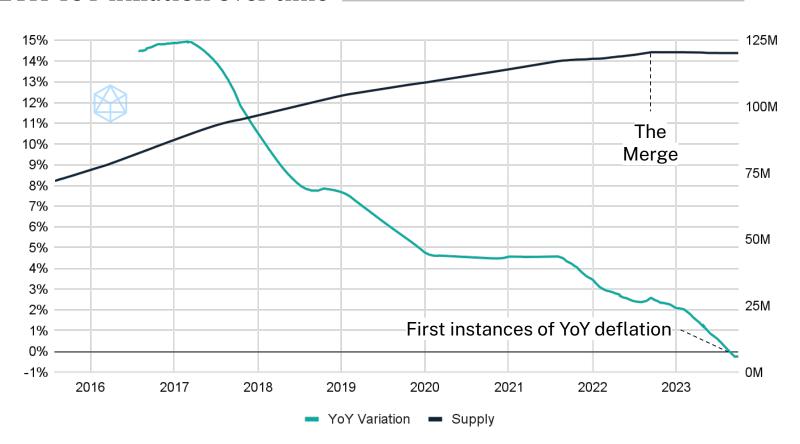


Source: Hashdex Research with data from Etherscan and beaconcha.in (from December 1, 2020 to September 30, 2023)

### Ethereum celebrates year-over-year deflation for the first time since inception

The drastic reduction in issuance after the switch to PoS, combined with the existing burn mechanism for ETH, has led Ethereum to become net deflationary on a year-over-year basis for the first time. This enhances the perception of scarcity for ETH and acts as an additional driver for the long-term increase in its value since less of the token supply becomes available for purchase over time.

#### ETH YoY inflation over time



Source: Hashdex Research with data from Etherscan and beaconcha.in (from July 30, 2015 to September 30, 2023).



Ethereum



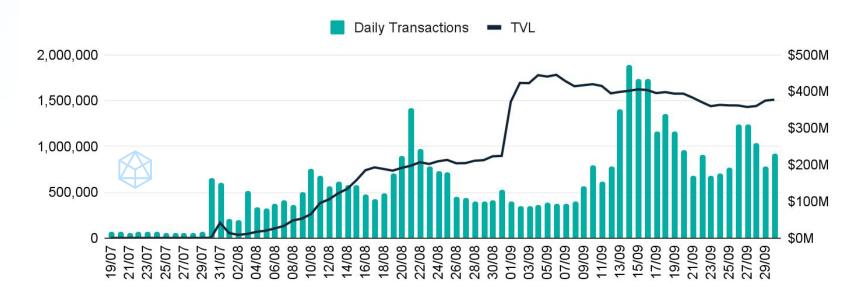


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#### Coinbase's L2 "Base" launches and gathers momentum in its first two months

Coinbase's Ethereum scaling solution, known as Base, stood out as a significant development in the last quarter. Spearheaded by a project named friend.tech, initiatives launched on Base quickly gathered substantial Total Value Locked (TVL) and conducted a significant number of transactions. As we foresaw at the beginning of the year, initiatives like these are prime candidates to trigger a new bullish trend for Ethereum.

#### Daily transactions and TVL on Base

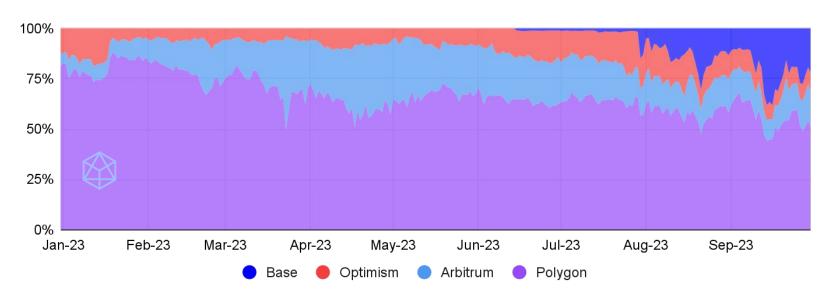


Source: Hashdex Research with data from Dune Analytics (from July 17, 2023 to September 30, 2023).

### Base launch steals user market share from Polygon, Arbitrum, and Optimism

Base has impacted the market share of other Layer-2 solutions that had previously garnered investors interest. The emergence of new scaling solutions such as Base, Arbitrum, and Optimism alongside Polygon in the ecosystem provides promising options for users entering the Web3 space in the upcoming years, which is an encouraging development.

#### Share of daily transactions in L2s



Source: Hashdex Research with data from <u>Polygonscan, Optimismscan, Arbiscan</u> and <u>Basesc</u>an (from December 31, 2022 to



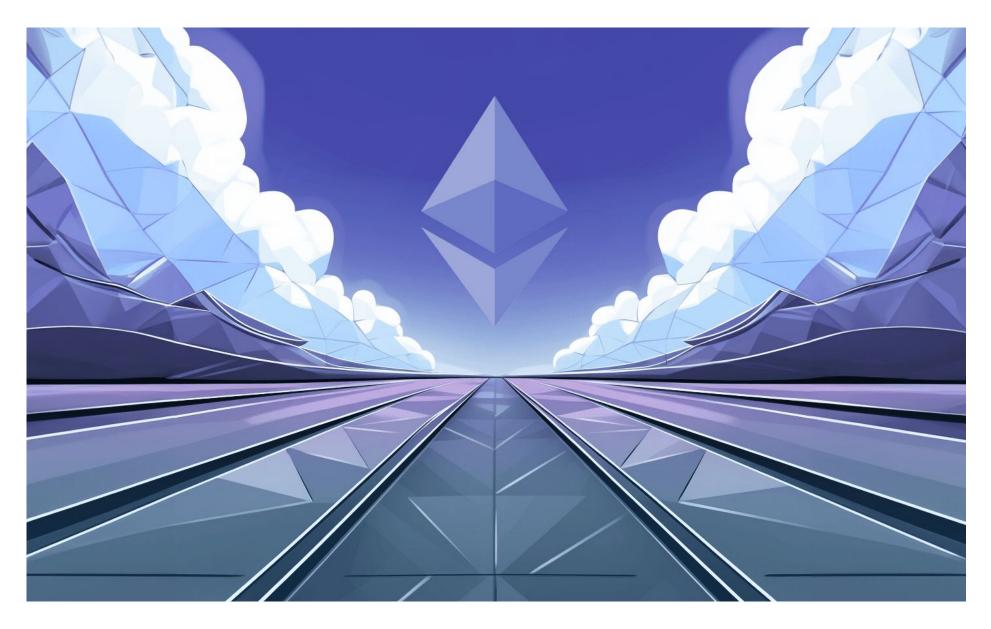
# Futures ETFs go live & spot ETF race begins: bullish signals for ETH

At the tail end of the flurry of activity around spot bitcoin ETFs, there were significant developments on a different, but related front: the filing of applications for the first spot ETH ETF in the US.

It remains unclear when exactly the SEC will approve a spot ether ETF. The SEC has 240 days to respond to an application and while there are regular checkpoints that require some response from the SEC, the agency is not required to make a final decision on the application until this period has passed. The first 19b-4 filing for a spot ether ETF was submitted on September 6, and so <u>analysts have suggested</u> that the first deadline will be in May 2024.

This is a strong sign that the environment in the US for regulated crypto investment products is improving and a recognition that investor demand for crypto assets is here to stay.

These filings also show growing confidence in Ethereum blockchain, as well as an improving understanding of how the world's dominant smart contract platform is creating opportunities for long-term investors.



Ethereum

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While on-chain fees, traded volumes, and TVL have fallen in comparison to the end of Q2'23, total stake and active addresses on Ethereum continue on their upward trends for the year







Metric	Q3'23	Q2'23	2022	1Y ago	QoQ	YTD	12M
Price (USD)	\$1,677	\$1,923	\$1,202	\$1,349	-12.8%	39.4%	24.3%
Market Cap (USD)	\$200.5B	\$222.6B	\$144.5B	\$161.3B	-9.9%	38.7%	24.3%
Dominance	18.0%	18.5%	17.9%	16.7%	-2.5%	0.8%	8.1%
24h Exchange Volume (USD)	\$1.5B	\$5.6B	\$1.5B	\$6.1B	-73.8%	-1.3%	-76.0%
Total Stake (ETH)	26.6M	20.5M	15.8M	14.0M	29.6%	68.4%	89.8%
Active Addresses	472,167	443,143	334,874	450,693	6.5%	41.0%	4.8%
Daily On-chain Fees (USD)	\$2.0M	\$7.2M	\$2.4M	\$2.7M	-71.9%	-14.8%	-25.8%
Total Value Locked (USD)	\$48.2B	\$53.4B	\$38.5B	\$48.9B	-9.8%	25.1%	-1.5%



# Performance of Hashdex's Indices

Comprehensive overview of Hashdex's suite of indices, designed to provide regulated exposure to crypto

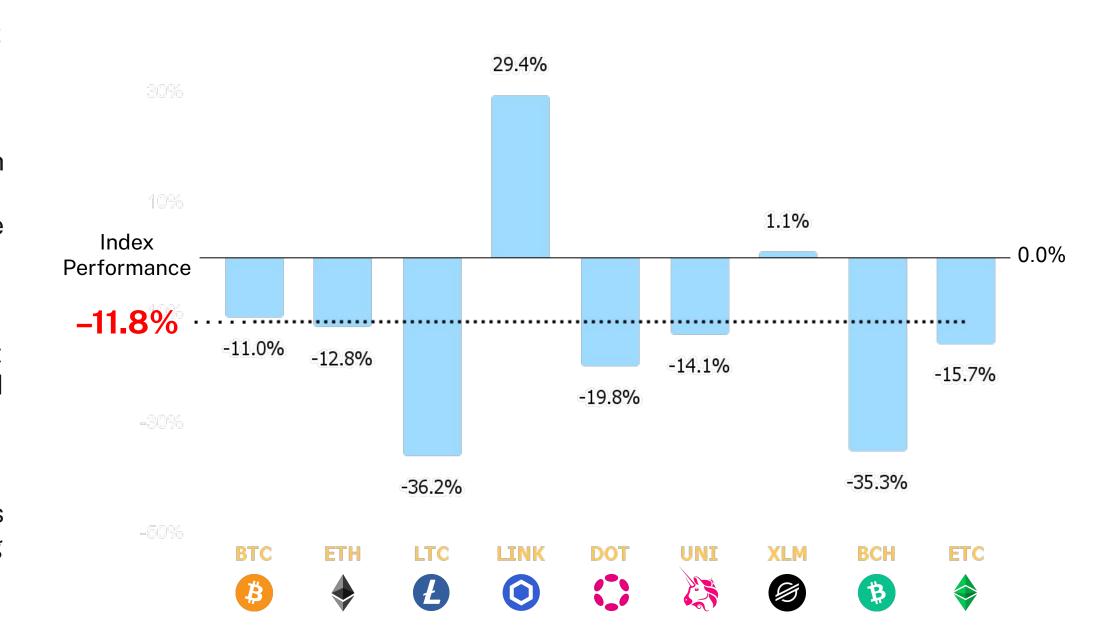
### The Nasdaq Crypto Index<sup>TM</sup> (NCI<sup>TM</sup>)

The Nasdaq Crypto Index (NCI) has reflected the moment of correction for crypto markets during the quarter, and had no changes to its constituents.

The main positive highlight was Chainlink (LINK), which achieved impressive growth of 29.4% during the quarter, driven by a significant partnership with Swift and the launch of its Cross-Chain Interoperability Protocol (CCIP).

Conversely, Litecoin and Bitcoin Cash, both long-standing components, experienced notably poor performance, yet their minor representation in the portfolio had a limited impact on the index's overall performance.

Meanwhile, the likely solid price performance of BTC and ETH, driven by their increasingly robust fundamentals, is expected to be the primary driver for a more promising end-of-year performance for the Nasdaq Crypto Index.



### Performances of indices tracked by Hashdex products

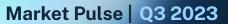








Index	Jul-23	Aug-23	Sep-23	Q3'23	Q2'23	YTD	12M
Nasdaq Bitcoin Reference Price	-3.8%	-10.0%	2.8%	-11.0%	7.0%	63.0%	37.3%
Nasdaq Crypto Index	-3.4%	-10.8%	2.4%	-11.8%	6.3%	53.7%	31.4%
Nasdaq Crypto Index Europe	-0.8%	-8.3%	-1.0%	-9.9%	1.6%	51.6%	24.2%
Nasdaq Ether Reference Price	-3.2%	-10.9%	1.1%	-12.8%	5.4%	39.4%	24.3%
Vinter Hashdex Risk Parity Momentum Crypto Index	6.8%	-12.8%	2.4%	-4.6%	-7.8%	24.7%	-
CF Web 3.0 Smart Contract Platforms Index	6.1%	-15.8%	0.8%	-9.9%	-17.6%	21.7%	-31.2%
CF DeFi Composite Index	12.8%	-22.5%	10.0%	-3.7%	-9.8%	21.4%	-8.7%
CF Digital Culture Composite Index	2.5%	-14.7%	-4.0%	-16.0%	-29.3%	-12.6%	-46.6%





# Highlights of the Quarter & Hashdex Reports

Explore the most highly anticipated events and our insights on all things crypto throughout the past quarter



SEC vs. Ripple - XRPs unlikely lifeline



Worldcoin - Redefining the meaning of Orbs



The infamous Curve Exploit

**TOKEN**2049

Token 2049 introduces Flatcoins



Polygon revamps their tokenomics (\$POL)



**Landmark Crypto Bill** 



Coinbase Futures: a better suite of Options



Crypto custody: Best practices for keeping digital assets secure



Ripple's (partial) victory against the SEC



Cryptocurrencies: The bigger the better?



<u>Crypto's Lollapalooza</u> <u>effect</u>



Orbs, Irises, and Al



Bitcoin's true impact

Bitcoin's Summer of

(Institutional) Love



The US is inching closer to a spot bitcoin ETF. Does it matter?



The Ethereum ETF race begins



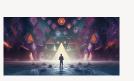
**Happy Mergeversary** 



Bitcoin's link between low volatility and outsized returns



Five ways crypto is benefiting from unprecedented macro conditions



Tokenization and getting old



Hello old friend: Volatility returns



Crypto's "sleeping" giant



BlackRock heats up a warming crypto spring



Altcoins respond to their moment in court



Bitcoin gets back to being Bitcoin



**BRC-20** - BRC-20 is a token standard on the Bitcoin blockchain that utilizes Ordinals Inscriptions to enable the creation and transfer of fungible tokens, providing functionalities for minting and transferring digital assets using Bitcoin.

**Burn** - The process of "burning" coins/tokens to incentivize network users to buy and invest in protocol-specific assets. Usually intended as a counter-inflationary mechanism, burning decreases the total crypto supply, potentially increasing the value of the remaining crypto supply.

**CBDC** - A central bank digital currency (CBDC) is a digital version of a country's fiat currency. Regulated by a country's monetary authority, CBDCs are designed to replace traditional fiat and increase ease of use for those that deploy them.

**Dominance** - The ratio between a crypto asset market capitalization and the total market capitalization of the asset class, which measures the relevance of a project in the industry.

**EVM-compatibility** - Whether or not a blockchain is able to write and deploy smart contract code that is compatible with the Ethereum Virtual Machine and can therefore be recognized by the Ethereum network nodes.

**Gas Fee** - The fees associated with transacting and executing smart contracts or decentralized applications on the Ethereum blockchain and other smart contract platforms.

**GBTC** - It is a digital currency investment product that makes Bitcoin (BTC) available to individual and institutional investors. It allows investors to access Bitcoin through a traditional investment vehicle.

**Hash Rate** - The conventional unit measure for the computational power on a Proof-of-Work network, a proxy for the security of a blockchain and how costly it is to attack it.

**Inscription** - Inscriptions refer to the metadata that is added or "inscribed" onto Bitcoin satoshis (sats), which are the smallest units of the bitcoin currency. These inscriptions can be attached to Bitcoin unspent transaction outputs (UTXOs) and store texts, images, audios, videos and even web applications.

**Layer-2 (L2)** - A parallel network that serves as a secondary set of off-chain solutions built on top of an existing Layer-1 to reduce bottlenecks and offer greater scalability and privacy.

**Lightning Network** - A scaling solution built atop Bitcoin that allows off-chain transactions with increased speed and lower transaction costs, without giving up security. Its capacity corresponds to the total BTC amount that all payment channels within the Lightning Network can send and receive..

**Merge** - Ethereum's transition from Proof-of-Work to Proof-of-Stake, which took place on September 15, 2022.

**NFTs** - Non-fungible tokens (NFTs) are a special type of token that represents a unique digital asset, such as a picture, a song or a video.

**Proof-of-Stake** - Consensus mechanism where validators lock an amount of native tokens as a guarantee of action in good faith, being randomly selected over time to propose and attest to new blocks of transactions.

**Proof-of-Work** - Consensus mechanism where miners utilize electricity and computer hardware to solve a cryptographic puzzle and become eligible to include a new block on the blockchain.

**Stablecoin** - A stablecoin is a digital currency created with the intent of holding a stable value with respect to another asset, such as fiat currencies, precious metals and other digital assets.

**Staking** - Staking involves pledging your cryptocurrency to support transaction validation on the blockchain. While you don't personally validate transactions, network computers handle this task, and major exchanges offer programs that make staking easy. The main motivation for staking is to earn rewards.

**September Effect** - It describes a phenomenon in which stock market returns are often negative during the month

**TradFi** - Traditional finance (TradFi) refers to the financial system that exists apart from blockchain, cryptocurrency, and decentralized finance (DeFi), typically characterized by legacy financial institutions such as banks and large corporate financial enterprises that operate using a centralized model.

**Tokenization** - Tokenization is the act of converting the value of a tangible or intangible asset into a token. The token itself is a piece of code made up of a distinctive asset reference, unique properties, and/or specific legal rights in accordance with the smart contract through which the token was generated.

**Total Stake** - The total amount of native tokens locked in a Proof-of-Stake blockchain (such as Ethereum, Solana or Polkadot) as a collateral for individuals to activate and operate the network consensus. The higher the dollar value of the total stake in a network, the more capital would be necessary to subdue the network

**Total Value Locked (TVL)** - The total value of all assets locked into a DeFi protocol or ecosystem. It is a metric often used to measure a protocol's growth and adoption.

**Web3** - A decentralized internet infrastructure that enables global users to connect and interact with digital assets, websites and apps without any centralized control.



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