

February 2024

digitalassets@wisdomtree.com





WisdomTree.eu +44 (0) 207448 4330

Table of Contents

1.	Table of Contents	1
2.	Market Commentary	2
3.	Insight of the Month	6
4.	Market Summary	8
5.	Macro Landscape	9
6.	Bitcoin And Ether Focus	. 11
7.	Sector Performance	. 12
8.	Regulated Futures	. 13
9.	Unregulated Futures	. 15
10.	On-Chain Activity	. 18
11	Valuation Metrics	10

Historical performance is not an indication of future performance and any investments may go down in value.



Market Commentary

Impact of the approval of US Spot Bitcoin ETFs for European Investors

Clearly, both the rumours of the approval of US spot bitcoin ETFs in November/December and the approval itself have reinvigorated the interest of institutional clients in Europe. After a very quiet 2022 and early 2023, the number of queries from clients and conversations around bitcoin ETPs has greatly increased. Flow-wise, this has not translated into large inflows yet. In Europe, in January 2024, crypto ETPs saw \$169.8 million¹ of outflows (-\$148m out of physically backed Bitcoin ETPs) but with Bitcoin price rising very quickly in February (as the time of writing above \$50,000 for the first time since 2021²) and the fourth halving on the horizon, reasons to invest are stacking up.

At this stage, we see three main impacts of the US launches on top of this increased interest:

- **Fees**. WisdomTree, in particular, slashed fees across our entire range of physically-backed crypto ETPs. The fee on the WisdomTree Physical Bitcoin was cut to 0.35% (from 0.95%), which is now the lowest fee level for physically-backed Bitcoin ETPs in Europe that do not participate in coin lending.
- **Issuer Selection**. Investors 'voting with their assets,' opting for the most robust solutions at the fairest prices and favouring asset managers with a diversified business model and a proven track record in protecting and managing their assets. We note that in January WisdomTree gathered the most flows with +\$44.4m (among the overall outflows of the month). Other diversified asset managers also saw some inflows, while crypto-only asset managers suffered outflows.

Historical performance is not an indication of future performance and any investments may go down in value.

¹ Source: WisdomTree, Bloomberg.

² Source: Bloomberg.



- **Institutionalisation**. This is a new step in the institutionalisation of cryptocurrencies. We are starting to see some integration of digital assets into multi-asset portfolios.

Investors look to Ether as the next potential ETF

Investors are closely eyeing Ether (ETH) as the next potential Exchange-Traded Fund (ETF). Investment bank TD Cowen has suggested a potential delay in the approval of a Spot ETH ETF in the United States, possibly extending until 2025 or beyond. They claim the decision to approve such an ETF is heavily political, and SEC Chair Gary Gensler faces a delicate situation. Progressive Democrats expressed dissatisfaction when the agency approved a spot bitcoin ETF recently, which may impact Gensler's stance on an Ethereum ETF. Gensler, seeking support from progressives, must carefully navigate this issue during an election year.

Notably, the SEC has not yet definitively classified Ether as either a security or a commodity. While this lack of classification may hinder potential approval, the precedent set by the Grayscale v. SEC case, which primarily enabled bitcoin ETFs, could directly apply to the case for an Ether ETF. Recently, the SEC postponed its decision on Grayscale Investments' proposal for a spot Ethereum ETF. Despite these complexities, Bloomberg's ETF analyst James Seyffart maintains expectations for Ether ETF approval between May and August of this year. Investors should keep an eye on May 23rd and 24th, which marks the 240-day window for the SEC to decide on proposals from VanEck and Ark/21Shares.

Ethereum and Solana Recent Network Incidents: A Comparative Analysis

Recently, Ethereum faced a critical incident involving its Nethermind client software. It resulted in about 8% of the network shutting down¹ temporarily. Luckily, the broader Ethereum network was unaffected due to the software

Historical performance is not an indication of future performance and any investments may go down in value.

¹ Source: CoinDesk.



client diversity across nodes. Although a relatively benign event, it did highlight a few risks to Ethereum network participants:

- Client Dominance: Approximately 85% of Ethereum nodes¹ run on the popular Geth software client. However, this concentration poses risks. If Geth were to have a bug rather than the Nethermind client, it could have significantly impacted the network.
- **Network Vulnerability**: As a result of this concentration, any bug in Geth becomes a bug in Ethereum itself. In the best-case scenario, executions might temporarily halt. In the worst case, an ETH inflation bug could devalue the currency, potentially leading to a coordinated rollback (analogous to the past ETH vs. ETH Classic split).

In early February, Solana experienced a similar situation, but with more severe consequences²:

- **Complete Unusability**: The Solana network was completely unusable for five hours.
- Critical Bug: An infinite loop in Solana's transaction process affected a version of its validator client used by 95% of the network.
- **Price Impact**: Solana's price sold off during the event, but remarkably, it recovered and still appreciated over 10% during the week.

This demonstrates an advantage for Ethereum: software client diversity. Unlike Solana, where a single client dominates, Ethereum's decentralized approach mitigates the risk of a catastrophic shutdown due to a bug. Ethereum runs on multiple versions of software clients (even if concentrated at 85% at the moment), as this continues to diversify, it further reduces the likelihood of network-wide failure. With the recent events, the community has further emphasized the need for this.

As an interesting aside - once the Solana bug was fixed, the network resumed normal operation, appending transactions to the blockchain. Interestingly,

¹ Source: CoinDesk.

² Source: CoinDesk, Bloomberg.

Historical performance is not an indication of future performance and any investments may go down in value.

Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.



during recovery, arbitrage bots capitalized on the network's price discrepancies, reportedly making an estimated \$25 million USD¹. This demonstrates some of the immediate costs associated with a temporary network shutdown.

In summary, a software client diversity contributes to a blockchains resilience, while high concentration may pose risks leading to incidents. These incidents underscore the importance of maintaining a varied software ecosystem in the crypto space.

Upcoming Ethereum Dencun Upgrade

Ethereum recently achieved a significant milestone with the third and final testnet deployment of the Dencun Upgrade on the Holesky testnet. This upgrade, which represents the culmination of extensive development efforts and collaboration among Ethereum core developers, is now poised for its mainnet deployment on March 13, 2024.

A key feature of the Dencun Upgrade is the introduction of protodanksharding (EIP-4844). This innovative concept allows data blobs to be sent and attached to blocks for Layer 2 transactions. By enabling Layer 2 rollups to transmit data more cost-effectively, this feature benefits end users through cheaper transactions.

The impact of the Dencun Upgrade extends beyond Layer 2 solutions. As we approach the deployment date, value locked and activity on Ethereum Layer 2s continue to climb, signaling growing interest and adoption. Overall, this upgrade is expected to enhance Ethereum's scalability and reduce congestion, making it a positive development for the entire Ethereum ecosystem.

¹ Source: X.com, @mathew_sigel, February 6, 2024

Historical performance is not an indication of future performance and any investments may go down in value.

Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.



Insight of the Month

Introduction to Proto-Danksharding

Proto-Danksharding, also known as EIP-4844, represents a significant advancement in Ethereum's scalability. Its primary objectives are twofold: **cost reduction** and **improved data availability** for layer-2 blockchains.

At its core, Proto-Danksharding introduces a novel transaction type that deals with "blobs" of data. These blobs are stored only for a limited duration (typically 1-3 months). Unlike regular data, blobs remain inaccessible to the Ethereum Virtual Machine (EVM) and are automatically purged after their designated lifespan.

By leveraging these data blobs, layer 2 rollups can substantially reduce the expenses associated with transmitting data, ultimately leading to more affordable transactions for end users.

The term "proto" signifies that this proposal serves as a foundational step toward the eventual implementation of full "danksharding." While protodanksharding provides immediate benefits, the long-term vision aims to extend scalability advantages even further.

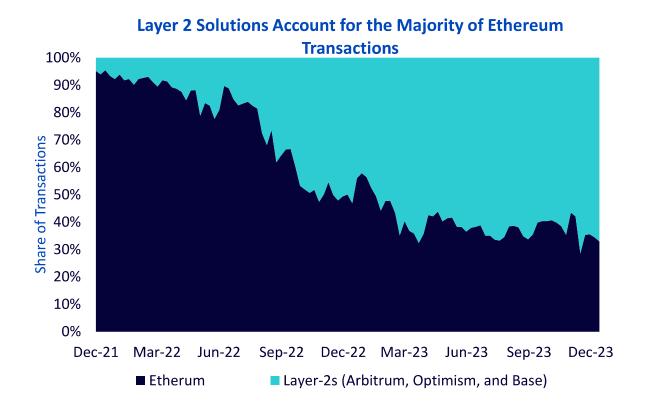
In practical terms, rollups currently face limitations due to the costly process of posting transactions which involves processing by all Ethereum nodes and permanent storage on the chain. Proto-danksharding's data blobs offer an elegant solution allowing rollups to send data more efficiently. While Full Danksharding remains a multi-year endeavor, proto-danksharding is expected to arrive in March of this year.

Ethereum has already seen a significant amount of its transactions come from layer 2s such as arbitrum, optimism, and base. With these upgrades, Ethereum aims to solve the scalability problem that has plagued many blockchain platforms and gain an edge over its competitors, such as Solana, which claims to offer higher throughput and lower costs. Ethereum's vision is

Historical performance is not an indication of future performance and any investments may go down in value.



to become the base decentralised blockchain that supports a variety of layer 2 solutions and dApps, creating a web3 world where users have more control, privacy and freedom over their online activities. This is a compelling scenario for Ethereum investors, who stand to benefit from the possible increased adoption and innovation of the platform.



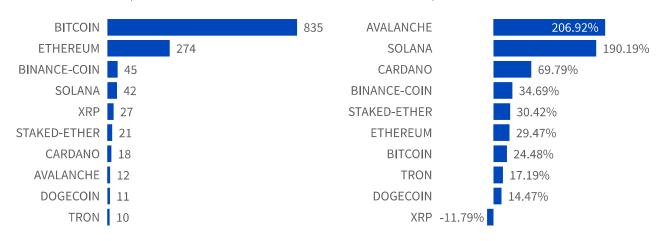
Source: @jhackworth, 'Ethereum and its L2s: Growth Comparison', Dune Analytics, as of 09/01/24.

Historical performance is not an indication of future performance and any investments may go down in value.

Market Summary

Top 10 by Market Cap | USDbn

3-Month Return | USD



Summary Statistics

Asset	Market Cap ▼	1m Return	3m Return	Volatility	Correlation w. Bitcoin
BITCOIN	835.23	1.88%	24.48%	47.53%	1.00
ETHEREUM	274.32	2.25%	29.47%	57.17%	0.70
BINANCE-COIN	44.92	-3.03%	34.69%	53.27%	0.37
SOLANA	42.28	-0.39%	190.19%	117.05%	0.58
XRP	27.36	-17.87%	-11.79%	53.30%	0.62
STAKED-ETHER	21.49	2.73%	30.42%	55.15%	0.67
CARDANO	17.65	-14.59%	69.79%	89.31%	0.64
AVALANCHE	12.17	-10.75%	206.92%	115.41%	0.53
DOGECOIN	11.25	-11.56%	14.47%	69.14%	0.60
TRON	9.89	5.72%	17.19%	39.93%	0.42

3-Month Correlation | Daily USD Returns

Asset	BITCOIN	ETHEREUM	BINANCE- COIN	SOLANA	XRP	STAKED- ETHER	CARDANO	AVALANCHE	DOGE COIN
A									
ETHEREUM	0.81								
BINANCE-COIN	0.60	0.60							
SOLANA	0.63	0.59	0.47						
XRP	0.40	0.47	0.34	0.42					
STAKED-ETHER	0.79	0.99	0.60	0.58	0.46				
CARDANO	0.66	0.68	0.55	0.65	0.63	0.66			
AVALANCHE	0.63	0.57	0.47	0.72	0.35	0.55	0.69		
DOGECOIN	0.60	0.61	0.49	0.51	0.41	0.58	0.64	0.63	
TRON	0.54	0.56	0.43	0.52	0.36	0.53	0.52	0.48	0.48

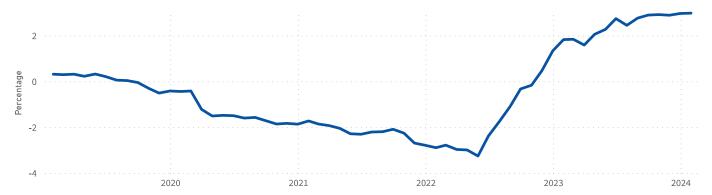
 $Source: Wisdom Tree.\ Volatility\ and\ correlation\ on\ 3-month\ USD\ returns.\ As\ of\ \underline{Wednesday},\ January\ 31,2024.$

Macro Landscape

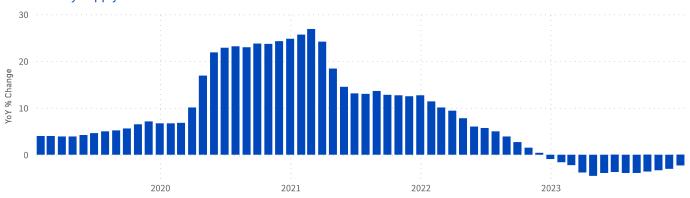




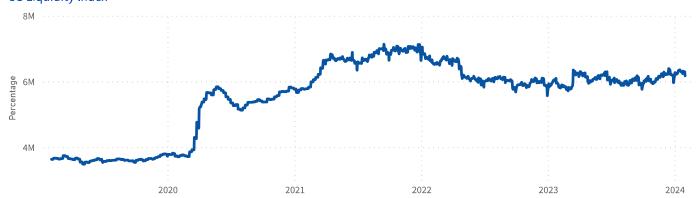
3-Month Real Yield



US M2 Money Supply



US Liquidity Index

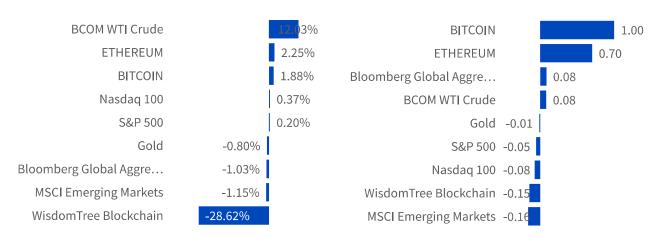


 $Source: Wisdom Tree, Bloomberg. \, As \, of \, Wednesday, \, January \, 31, \, 2024.$

Crypto vs. Traditional Assets

1-Month Performance

Correlation with Bitcoin



Summary Statistics

Asset	1m Return	3m Return	Volatility	Correlation w. Bitcoin
DCOM WITH Country	12.020/	4.150/	40.000/	0.00
BCOM WTI Crude	12.03%	-4.15%	40.99%	0.08
ETHEREUM	2.25%	29.47%	57.17%	0.70
BITCOIN	1.88%	24.48%	47.53%	1.00
Nasdaq 100	0.37%	14.88%	17.26%	-0.08
S&P 500	0.20%	12.59%	13.60%	-0.05
Gold	-0.80%	5.24%	14.11%	-0.01
Bloomberg Global Aggregate	-1.03%	8.18%	8.49%	0.08
MSCI Emerging Markets	-1.15%	12.06%	11.59%	-0.16
WisdomTree Blockchain	-28.62%	27.90%	80.12%	-0.15

3-Month Correlation | Daily USD Returns

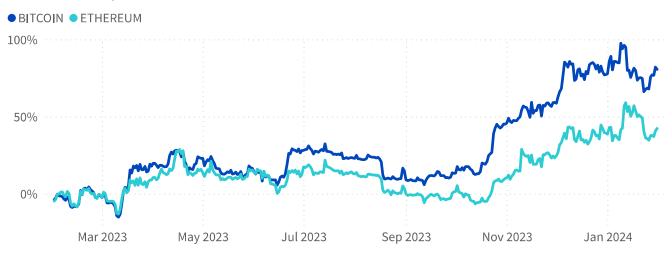
Asset	BITCOIN	ETHEREUM	Nasdaq 100	S&P 500	MSCI Emerging Markets	WisdomTree Blockchain	Bloomberg Global Aggregate	Gold
ETHEREUM	0.81							
Nasdaq 100	-0.02	0.02						
S&P 500	-0.01	0.01	0.92					
MSCI Emerging Markets	-0.01	-0.01	0.85	0.93				
WisdomTree Blockchain	0.00	-0.04	0.50	0.52	0.53			
Bloomberg Global Aggregate	-0.02	-0.06	0.21	0.16	0.34	0.28		
Gold	-0.12	-0.19	-0.02	-0.04	0.06	0.11	0.54	
BCOM WTI Crude	-0.07	-0.05	0.01	0.13	0.18	0.07	-0.05	0.06

Source: WisdomTree. Volatility and correlation on 3-month USD returns. As of Wednesday, January 31, 2024.

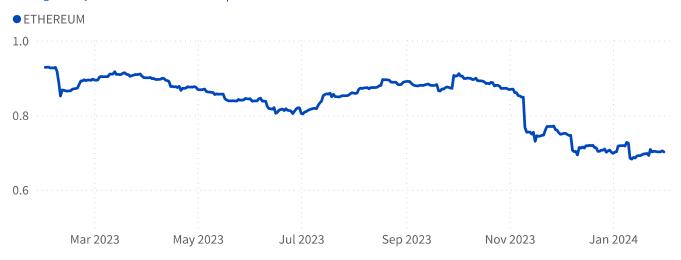
Equity indices are USD Net Total Return.

Bitcoin And Ether Focus

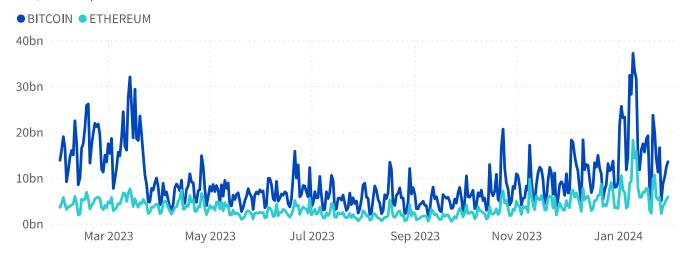
Cumulative Return | 12 Months



Rolling 90-Day Correlation with Bitcoin | 12 Months



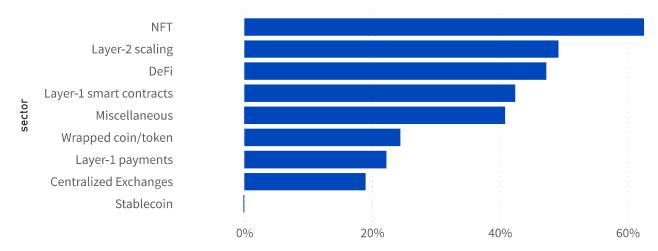
Daily Volume | USD



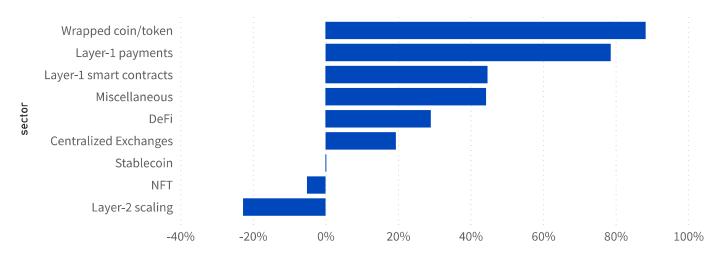
 $Source: Wisdom Tree, Messari. \ As of \underline{Wednesday}, January \ 31, 2024.$

Sector Performance

3-Month Performance



1-Year Performance



Sector Performance

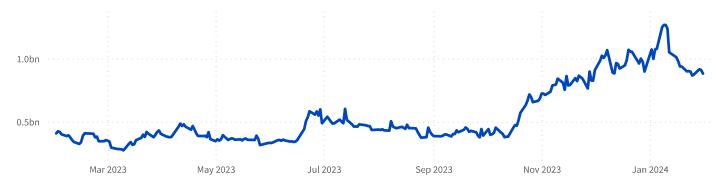
sector	YTD	1M	3M	6M	1Y
Wrapped coin/token	1.7%	1.7%	24.4%	46.7%	88.3%
Layer-1 payments	0.4%	0.6%	22.2%	39.9%	78.6%
Stablecoin	0.0%	-0.0%	-0.1%	0.0%	0.0%
Layer-1 smart contracts	-0.8%	-1.4%	42.4%	39.7%	44.7%
Centralized Exchanges	-3.0%	-2.6%	19.0%	20.1%	19.4%
Uncategorized	-3.7%	-4.1%	39.4%	37.8%	7.5%
DeFi	-4.7%	-5.9%	47.3%	43.6%	29.0%
NFT	-11.1%	-11.7%	62.6%	65.8%	-5.1%
Layer-2 scaling	-11.4%	-9.5%	49.2%	30.0%	-22.7%

Source: WisdomTree. As of $\underline{\text{Wednesday}}$, January 31, 2024.

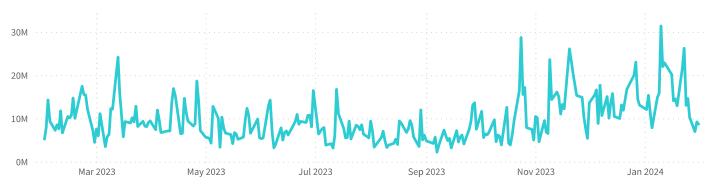
Regulated Futures (1/2)



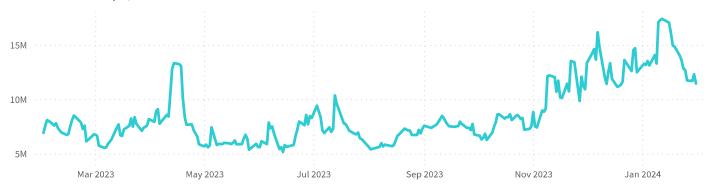
Bitcoin CME Futures | Open Interest USD



Ether CME Futures | Volume USD



Ether CME Futures | Open Interest USD

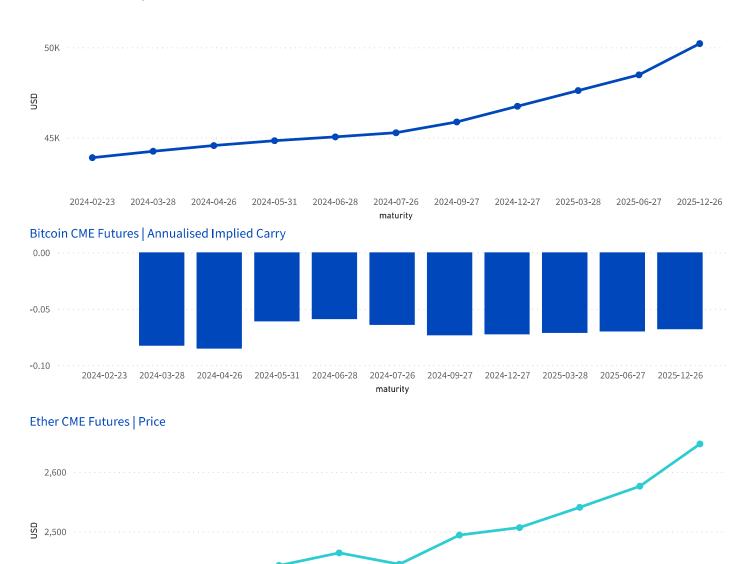


 $Source: Wisdom Tree, Bloomberg. \ As of \underline{Wednesday}, January \ 31, 2024.$

Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

Regulated Futures (2/2)

Bitcoin CME Futures | Price



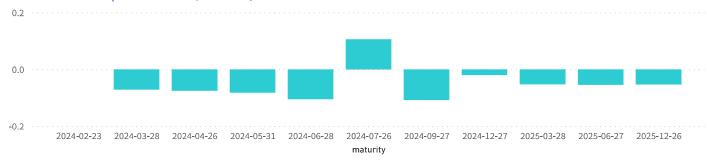


2024-03-28

2024-04-26

2024-05-31

2024-06-28



2024-07-26

maturity

2024-09-27

2024-12-27

2025-03-28

2025-06-27

2025-12-26

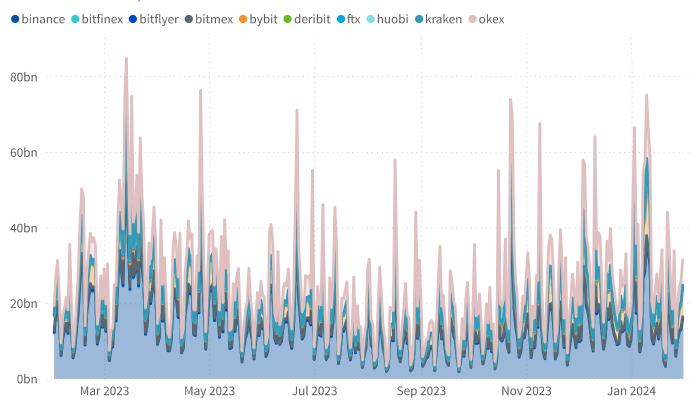
Source: WisdomTree, Glassnode. As of 1/31/2024.

Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

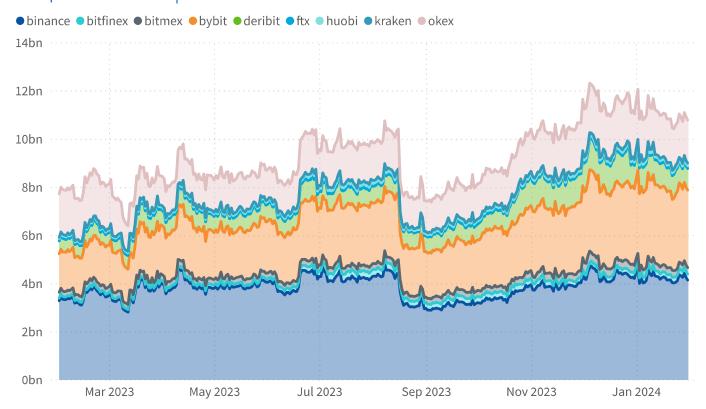
2024-02-23

Unregulated Futures (1/3)

USD Volume in Futures | Bitcoin



USD Open Interest in Futures | Bitcoin

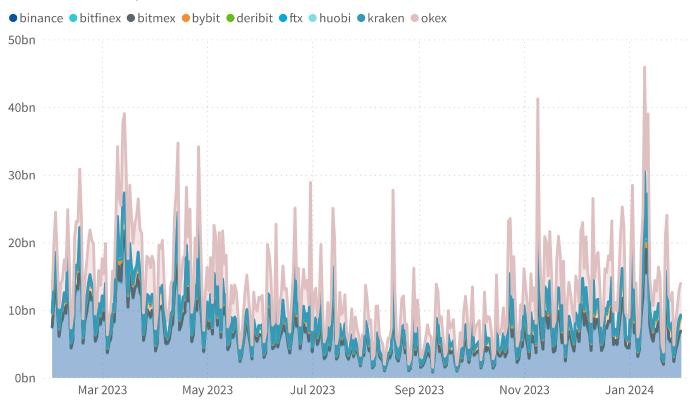


Source: WisdomTree, Glassnode. As of Tuesday, January 31, 2023.

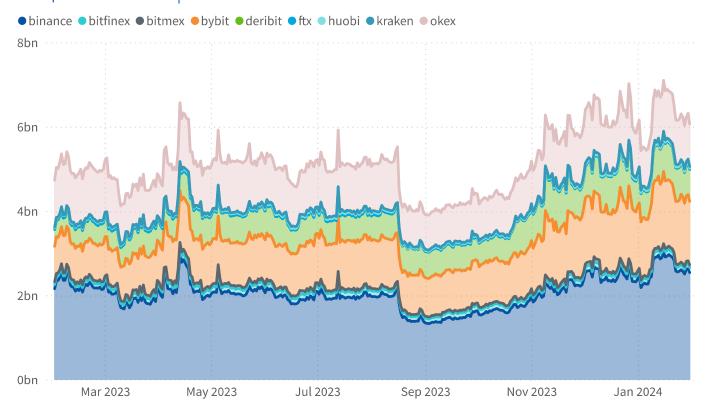
Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

Unregulated Futures (2/3)

USD Volume in Futures | Bitcoin



USD Open Interest in Futures | Bitcoin

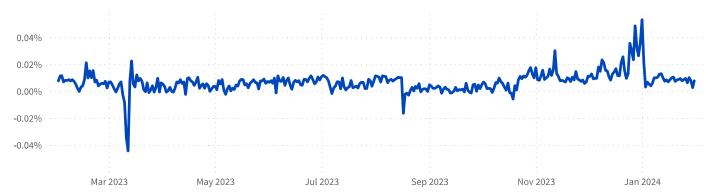


 $Source: Wisdom Tree, Glass node. \ As of \underline{Wednesday, January 31, 2024}.$

Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

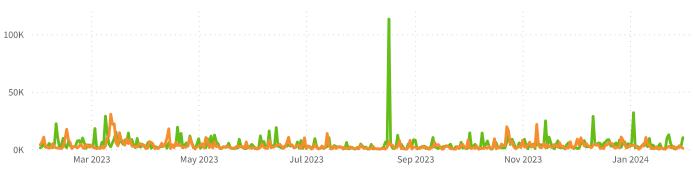
Unregulated Futures (3/3)

Bitcoin | Perpetual Funding Rate

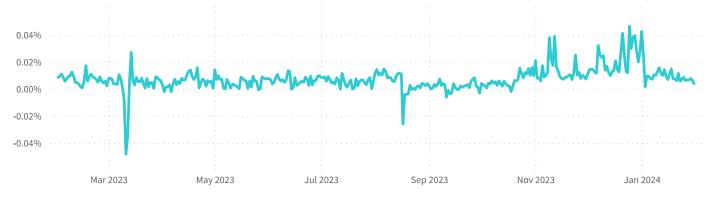


Bitcoin | Liquidated Volume

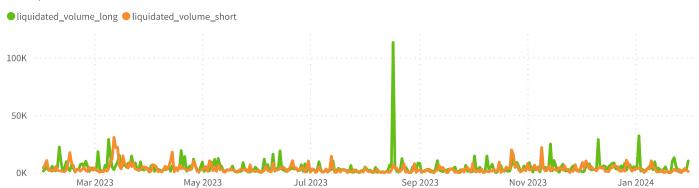




Ether | Perpetual Funding Rate



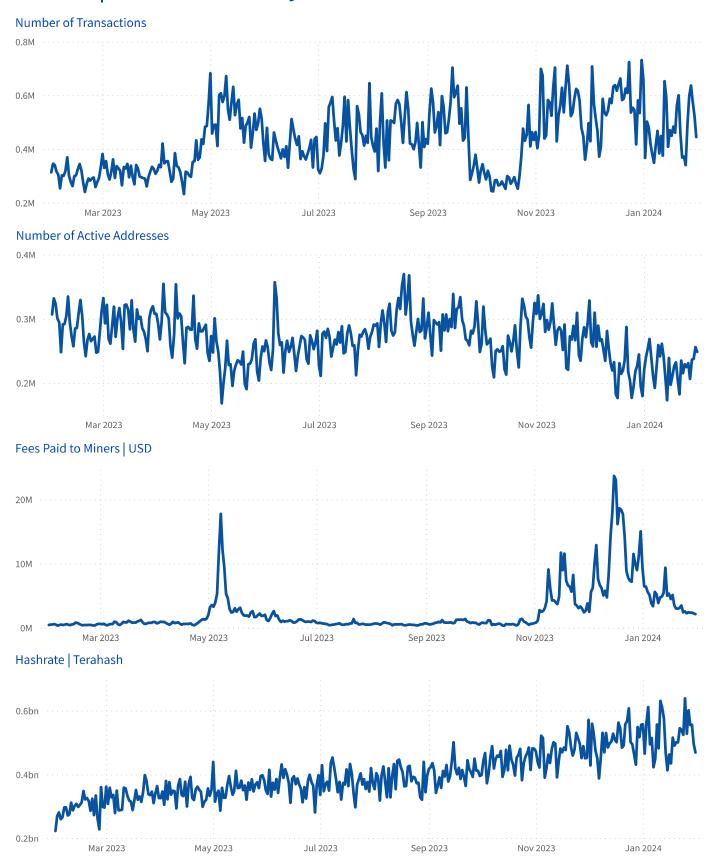
Ether | Liquidated Volume



Source: WisdomTree, Glassnode. As of Wednesday, January 31, 2024.

Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

Bitcoin | On-Chain Activity



Source: WisdomTree, Glassnode. As of Wednesday, January 31, 2024.

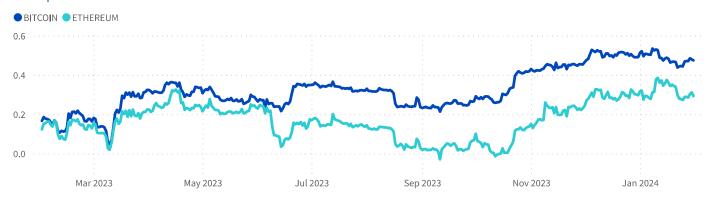
Historical performance is not an indication of future performance and any investments may go down in value. Cryptocurrencies are a high-risk investment and may not be suitable for all types of investor. Cryptocurrencies can demonstrate higher volatility than other asset classes.

Valuation Metrics

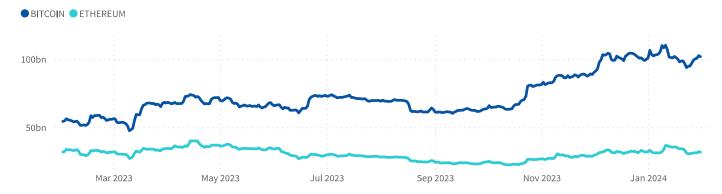




NUPL | Net Unrealised Profit Loss



Exchange Balances | USD



 $Source: Wisdom Tree, Glass node. \ As of \underline{Wednesday}, January 31, 2024.$

Disclaimer

Important Information

Marketing communications issued in the European Economic Area ("EEA"): This document has been issued and approved by WisdomTree Ireland Limited, which is authorised and regulated by the Central Bank of Ireland.

Marketing communications issued in jurisdictions outside of the EEA: This document has been issued and approved by WisdomTree UK Limited, which is authorised and regulated by the United Kingdom Financial Conduct Authority. WisdomTree Ireland Limited and WisdomTree UK Limited are each referred to as "WisdomTree" (as applicable). Our Conflicts of Interest Policy and Inventory are available on request.

For professional clients only. The information contained in this document is for your general information only and is neither an offer for sale nor a solicitation of an offer to buy securities or shares. This document should not be used as the basis for any investment decision. Investments may go up or down in value and you may lose some or all of the amount invested. Past performance is not necessarily a guide to future performance. Any decision to invest should be based on the information contained in the appropriate prospectus and after seeking independent investment, tax and legal advice.

The application of regulations and tax laws can often lead to a number of different interpretations. Any views or opinions expressed in this communication represent the views of WisdomTree and should not be construed as regulatory, tax or legal advice. WisdomTree makes no warranty or representation as to the accuracy of any of the views or opinions expressed in this communication. Any decision to invest should be based on the information contained in the appropriate prospectus and after seeking independent investment, tax and legal advice.

This document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public offering of shares or securities in the United States or any province or territory thereof. Neither this document nor any copy hereof should be taken, transmitted or distributed (directly or indirectly) into the United States.

Although WisdomTree endeavours to ensure the accuracy of the content in this document, WisdomTree does not warrant or guarantee its accuracy or correctness. Where WisdomTree has expressed its own opinions related to product or market activity, these views may change. Neither WisdomTree, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this document or its contents.