

# Around the block

Monthly cryptocurrency and blockchain related highlights from the Truist Investment Advisory Group

October 12, 2022

## Off the block

As the crypto winter persists, many crypto investors have made investment decisions based solely on the speculative value of crypto rather than the long-term value of the underlying blockchain technology.

The recent Converge22 conference, hosted by technology company Circle and its founder Jeremy Allaire, suggested that we could be pivoting from a period focused on speculation to one focused on innovation and utility. We think this could be a healthy shift for three reasons:

- It could pave the way for investors to make more informed decisions about the utility of the underlying technology rather than speculative appeal.
- It reinforces that blockchain technology is transformational and not limited to just crypto currencies.
- Growing blockchain use cases and compatible solutions allow for future investment opportunities yet to be created.

We remain focused on regulatory progress as one of the first potential catalysts that could begin to thaw crypto from its winter season.

**Investing in speculative investments, like those related to cryptocurrency, involves a high degree of risk and is not suitable for all investors.**



## Industry developments

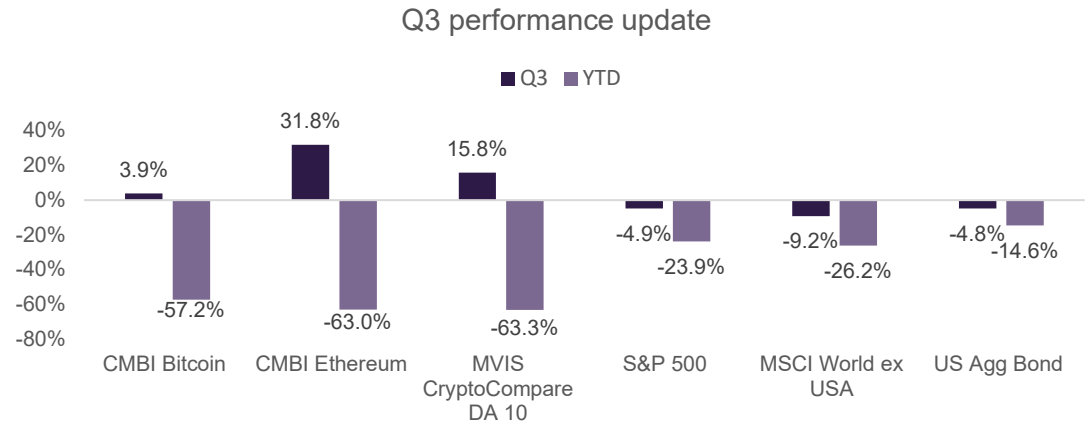
- NASDAQ made its first steps in crypto services launching a bitcoin and ether custody service for institutional investors.
- Mastercard launched its new *Crypto Secure* solution aimed to help consumers bridge the gap between crypto and traditional finance in a safe and seamless way.

## Regulatory developments

- The Financial Stability Oversight Council released its *Report on Digital Asset Financial Stability Risks and Regulation* on October 3<sup>rd</sup> representing a key step on the road to regulation.
- The Basel Committee on Banking Supervision released a study finding some of the world's largest banks only have \$9 billion in crypto asset exposure.

## Chart of the month — Divergent Q3 performance

Crypto markets outperformed traditional assets in Q3 despite drawdowns in August and September. Investors should remain aware that crypto continues to trade as a high risk asset as evidenced by its YTD returns of -50% or less. We remain mired in a crypto winter, but any signs of a Fed pivot or crypto regulation could strike a more positive tone in 2023.



Data sources: Truist IAG, Coin Metrics, Morningstar Direct

### Investment and Insurance Products:

- Are Not FDIC or any other Government Agency Insured
- Are Not Bank Guaranteed
- May Lose Value

Wealth

# Performance monitor (9/30/2022)

## Crypto and traditional indices

Bitcoin/Ethereum	Composition	1 Mo	YTD	1 Yr
CMBI Bitcoin		-2.8%	-57.2%	-55.1%
CMBI Ethereum		-12.7%	-63.0%	-55.2%
CMBI Btc/Eth		-7.2%	-59.5%	-55.2%
<b>Diversified Baskets</b>				
CMBI 10 Cap Wgt	cap weight	-6.6%	-62.4%	-58.8%
CMBI 10 Even Wgt	equal weight	-5.5%	-69.0%	-65.6%
CMBI ex-bitcoin	CMBI 10 - BTC	-11.0%	-67.5%	-62.8%
MVIS CryptoCompare DA 10	30% coin cap	-4.4%	-63.3%	-58.7%
MVIS CryptoCompare DA 25	20% coin cap	-3.2%	-66.4%	-62.7%
<b>MVIS Sector Leaders</b>				
Smart Contracts		-5.3%	-72.6%	-71.1%
DeFi		-6.5%	-72.6%	-75.0%
Media and Entertainment		-0.5%	-82.9%	-93.3%
Infrastructure		9.1%	-71.7%	-68.1%
<b>Equities</b>				
NYSE Factset Global Blockchain	digital equities	-14.7%	-65.7%	-66.0%
MVIS Global Digital Assets Equity	digital equities	-17.6%	-73.7%	-77.1%
S&P 500		-9.2%	-23.9%	-15.5%
MSCI World ex USA		-9.3%	-26.2%	-23.9%
MSCI EM		-11.7%	-27.2%	-28.1%
<b>Fixed Income</b>				
Bloomberg US Agg Bond		-4.3%	-14.6%	-14.6%
Bloomberg US Treasury US TIPS		-6.6%	-13.6%	-11.6%
<b>Commodities</b>				
Bloomberg Commodity		-8.1%	13.6%	11.8%
SPDR® Gold Shares		-2.6%	-8.4%	-4.5%

## Crypto assets month in review

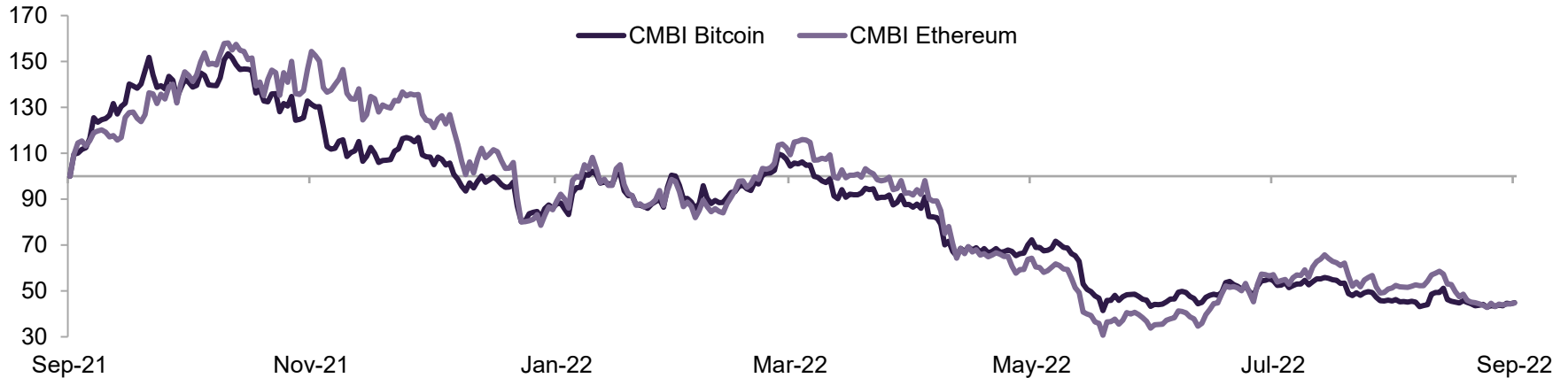
- Crypto assets significantly outperformed traditional assets in Q3 but investors would be well served to note this is not an all-clear sign. Q3 gains came entirely in July as crypto and other risk assets bounced off their mid-June lows and Ethereum strongly advanced ahead of its Merge on September 15<sup>th</sup>.
- The July rally was followed by negative months in August and September and today we remain near record-high correlations between crypto and the S&P 500 as a core risk asset.
- In the near-term we believe crypto will trade in sync with other risk assets and continue to be weighed down by weaker macro conditions in general and tight Fed policy in particular.
- Three conditions that could shift the crypto winter into a crypto thaw are a Fed pivot, resolution to the Ukraine war and regulatory clarity. In our view, the latter condition is more likely in the near term as responses continue to roll in to President Biden's March executive order, but none of the three appear to be imminent prior to year end.

## Notable callouts for the month:

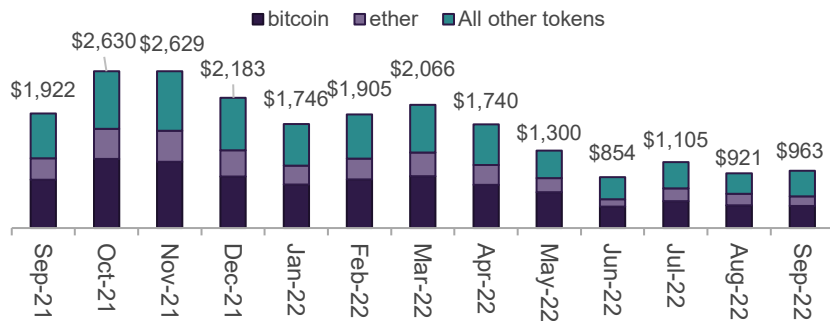
- The post Ethereum "Merge", has turned out to be a sell the news story. Ether prices have fallen 20% since its successful conversion to a proof-of-stake validation process on September 15<sup>th</sup>, essentially wiping out the pre-merge surge in ether prices.
- Digital equity indices were a notable underperformer in September as miners have been impacted by the decline in Ethereum revenue and bitcoin miners have had to work harder for fewer BTC rewards. Equity cash raises could signal further stress in the near term.
- Infrastructure tokens such as Quant and Chainlink have led the infrastructure sector to healthy September gains in an otherwise down market as we note on p. 4.

# Cryptocurrency ecosystem snapshot as of 9/30/22

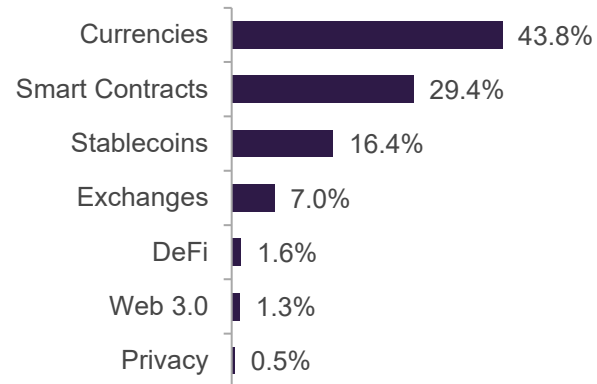
### Bitcoin and ether 1-year indexed returns (9/30/2022)



### Cryptocurrency aggregate market cap (\$billions) with bitcoin and ether dominance



### Cryptocurrency ecosystem sector composition



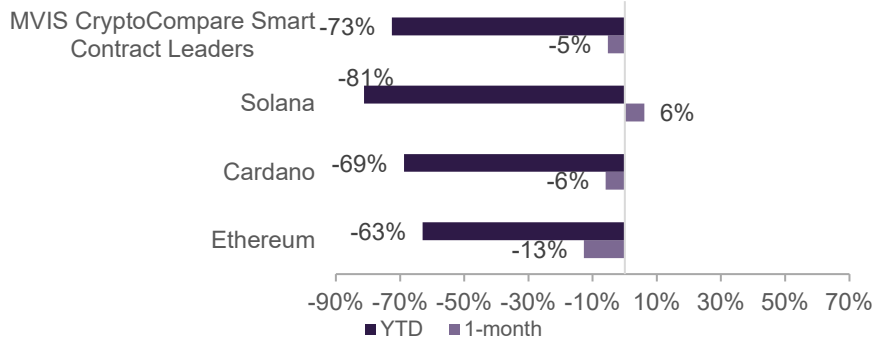
Data sources: Truist IAG, CoinMetrics, Messari



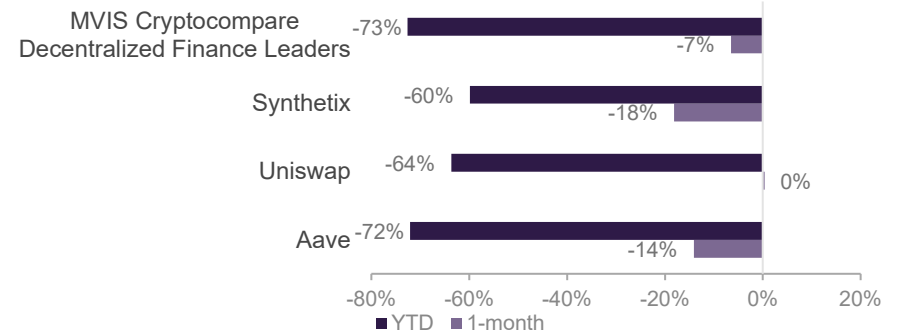
# Key crypto sectors 9/30/22

Differentiating between crypto sectors provides industry perspective similar to sectors within the S&P 500.

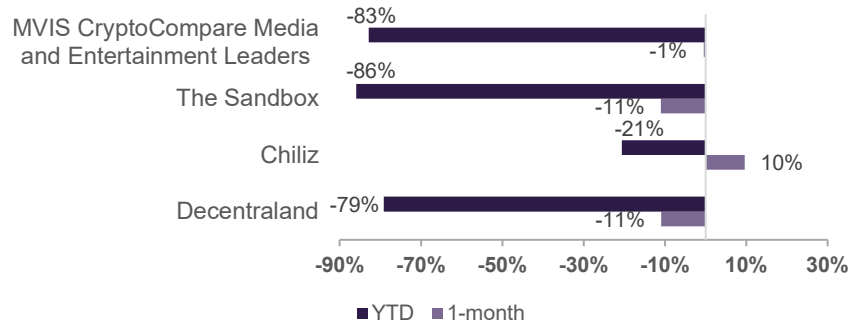
## Smart contract index and top 3 tokens



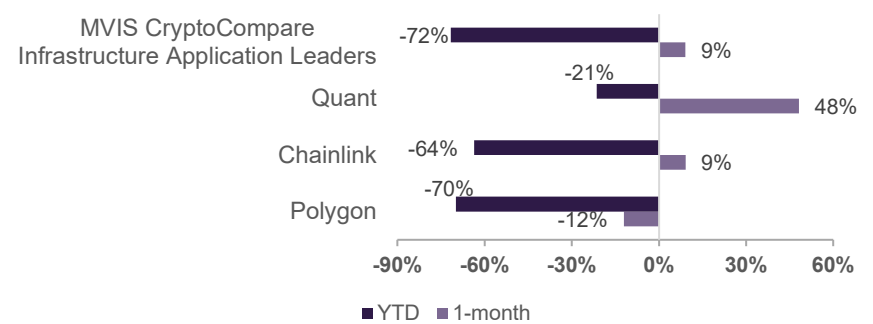
## DeFi index and top 3 tokens



## Metaverse index and top 3 tokens



## Infrastructure index and top 3 tokens



Data sources: Truist IAG, MVIS CryptoCompare, Messari, Morningstar.  
See disclosures for more on index definitions and methodology.

# September 2022 top 25 tokens by market cap

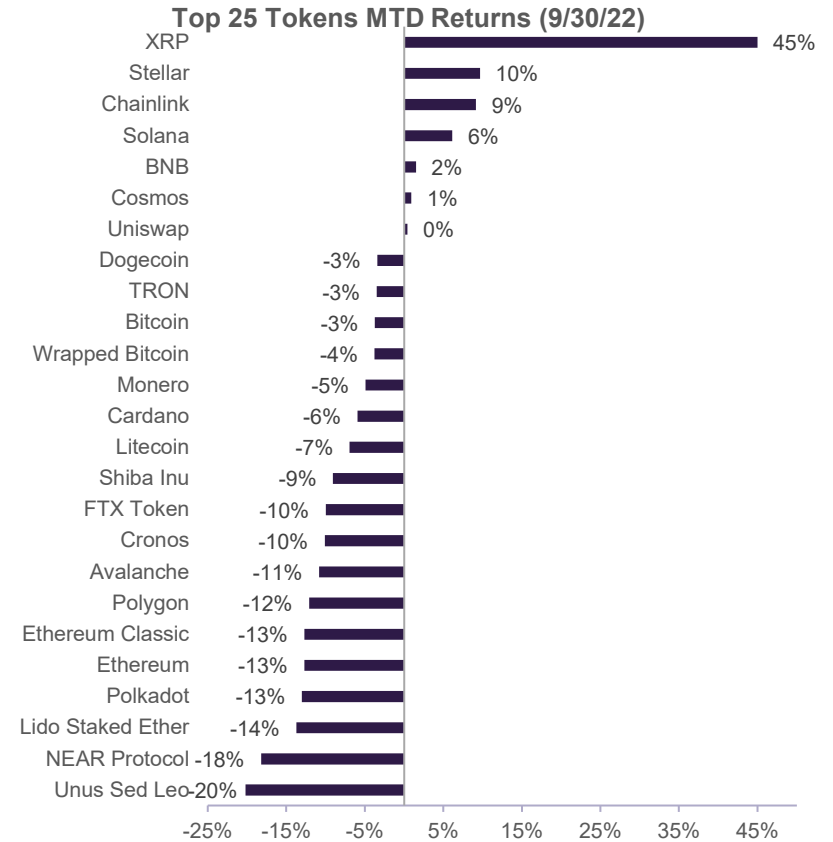
**Top 25 cryptocurrencies and top five stablecoins:  
90% of total crypto market cap**

Rank	Name	Symbol	Sector	Mkt Cap (\$billions)	Mkt Cap Dominance	Cumulative Mkt Cap Dominance
1	Bitcoin	BTC	Currencies	\$ 371.6	38.7%	38.7%
2	Ethereum	ETH	Smart Contract Platforms	\$ 162.8	17.0%	55.7%
3	BNB	BNB	Smart Contract Platforms	\$ 45.5	4.7%	60.4%
4	XRP	XRP	Currencies	\$ 24.2	2.5%	62.9%
5	Cardano	ADA	Smart Contract Platforms	\$ 14.8	1.5%	64.5%
6	Solana	SOL	Smart Contract Platforms	\$ 11.8	1.2%	65.7%
7	Dogecoin	DOGE	Currencies	\$ 8.0	0.8%	66.5%
8	Polkadot	DOT	Smart Contract Platforms	\$ 7.2	0.8%	67.3%
9	Polygon	MATIC	Scaling	\$ 6.8	0.7%	68.0%
10	Shiba Inu	SHIB		\$ 6.6	0.7%	68.7%
11	Lido Staked Ether	STETH		\$ 5.8	0.6%	69.3%
12	TRON	TRX	Smart Contract Platforms	\$ 5.6	0.6%	69.9%
13	Avalanche	AVAX	Smart Contract Platforms	\$ 5.1	0.5%	70.4%
14	Uniswap	UNI	Decentralized Exchanges	\$ 4.8	0.5%	70.9%
15	Wrapped Bitcoin	WBTC		\$ 4.8	0.5%	71.4%
16	Unus Sed Leo	LEO	Centralized Exchanges	\$ 4.2	0.4%	71.8%
17	Litecoin	LTC	Currencies	\$ 3.8	0.4%	72.2%
18	Ethereum Classic	ETC	Smart Contract Platforms	\$ 3.8	0.4%	72.6%
19	Chainlink	LINK	Data Management	\$ 3.7	0.4%	73.0%
20	Cosmos	ATOM	Smart Contract Platforms	\$ 3.7	0.4%	73.4%
21	FTX Token	FTT	Centralized Exchanges	\$ 3.2	0.3%	73.7%
22	Stellar	XLM	Currencies	\$ 2.9	0.3%	74.0%
23	NEAR Protocol	NEAR	Smart Contract Platforms	\$ 2.8	0.3%	74.3%
24	Cronos	CRO	Payment Platforms	\$ 2.8	0.3%	74.6%
25	Monero	XMR	Currencies	\$ 2.7	0.3%	74.9%

Top 5 Stablecoins						
Tether	USDT	Stablecoins	\$ 68.0	7.1%	7.1%	
USD Coin	USDC	Stablecoins	\$ 48.6	5.1%	12.1%	
Binance USD	BUSD	Stablecoins	\$ 20.9	2.2%	14.3%	
Dai	DAI	Stablecoins	\$ 6.4	0.7%	15.0%	
FRAX	FRAX	Stablecoins	\$ 1.4	0.1%	15.1%	

## Top 25 September 2022 performance rankings



Data sources: Truist IAG, Messari

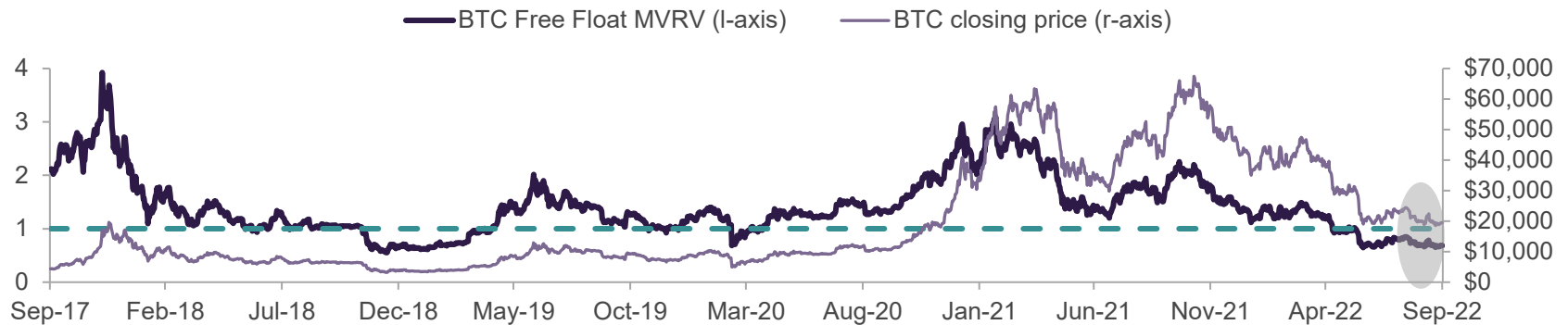
# Valuation corner

Truist Advisory Services, Inc.

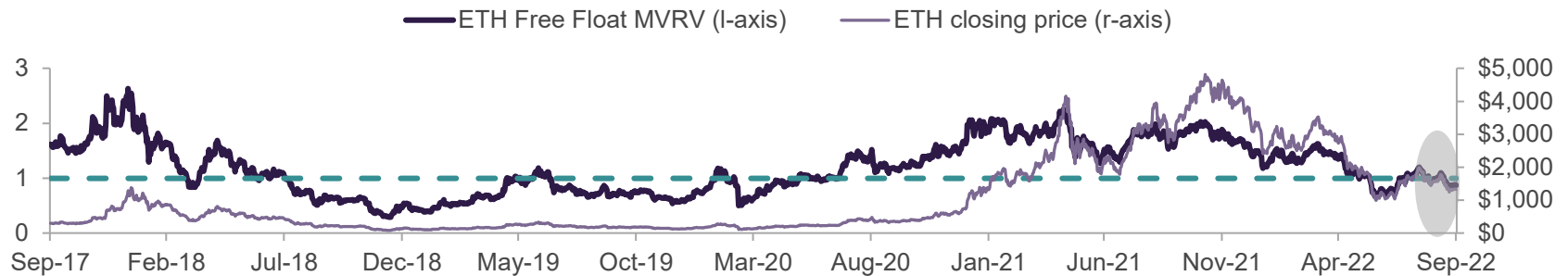
Market value to realized value (MVRV) is a popular crypto valuation metric since traditional metrics, like the price to earnings ratio, are rarely applicable. MVRV compares the current market value of the active supply of a given cryptocurrency over its realized value, or the value each unit of cryptocurrency was last transacted at.

In simple terms, MVRV gives a sense of current market value over aggregate cost basis, thereby providing an estimate of unrealized gain/loss. A value of one, or the break-even level, is a key support level while values below one, especially in more mature tokens like bitcoin, have historically presented buying opportunities. Presently, both bitcoin and ether trade below one, indicating more attractive valuations. However, it is important to note that each has experienced extended periods of time trading below the key break-even threshold of one.

## Bitcoin MVRV



## Ethereum MVRV



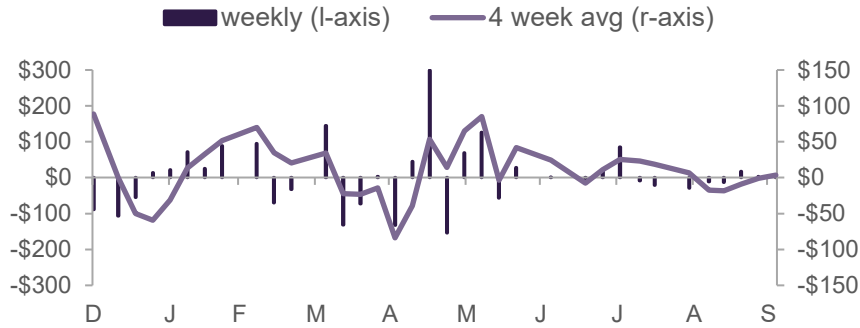
Data sources: Truist IAG, CoinMetrics



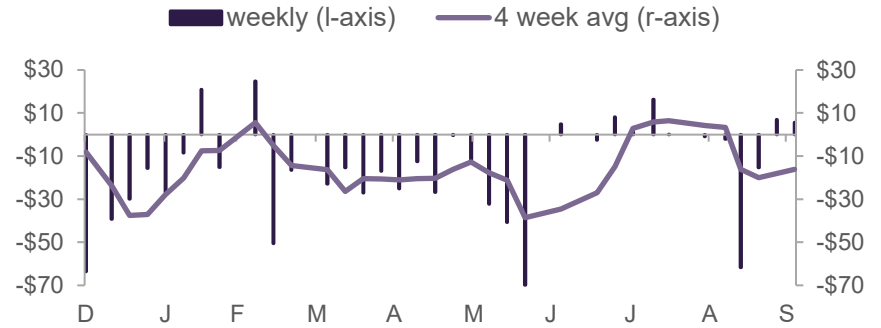
Wealth

# Year-to-date exchange-traded, mutual fund, and trust product fund flows (in \$ millions)

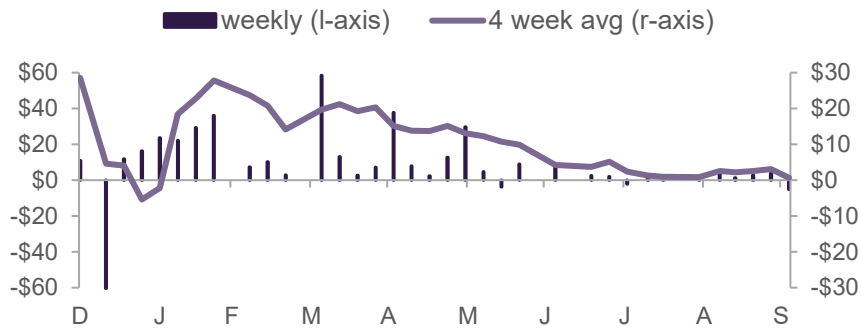
### Bitcoin product flows



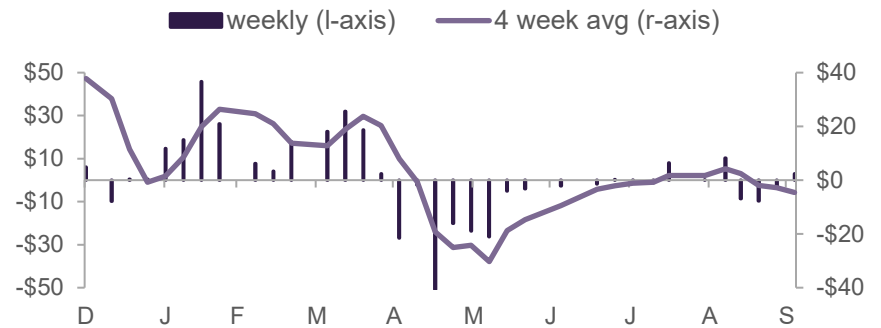
### Ethereum product flows



### Non bitcoin/ether product flows (ex short bitcoin)



### Blockchain equity product flows



Data sources: Truist IAG, CoinShares. Product flows measured by ETPs, mutual funds, and OTC trusts.

# Digital glossary

## Digital technologies

**Cryptocurrency** refers to cryptographic currencies like bitcoin and alternative coins or ‘altcoins’, launched after the success of bitcoin. This category of digital assets is designed to work as a medium of exchange, store of value, or to power applications.

**Token** is a subset of cryptocurrencies. Tokens are units of value issued by platforms built on top of existing blockchains.

**Bitcoin** was the first system of global, decentralized, scarce, digital money as initially introduced in a white paper titled Bitcoin: A Peer-to-Peer Electronic Cash System by Satoshi Nakamoto.

**Ethereum** is a decentralized, public blockchain network that supports composable smart contracts which can support decentralized applications as well as peer-to-peer transfers. “ether” is the native cryptocurrency of the Ethereum network.

**Stablecoins** are the tokens designed to track the value of an off-chain asset, such as a fiat money or exchange traded commodity, most commonly U.S. dollars.

**Smart contract** is a software, typically carried on a decentralized public blockchain, that can execute or enforce pre-determined actions or agreements without the intervention of a centralized intermediary.

**DeFi** means decentralized finance; a peer-to-peer software-based network of protocols that can be used to facilitate traditional financial services like borrowing, lending, trading derivatives, insurance and more through non-custodial smart contracts carried on public blockchain networks.

**NFT** means non-fungible tokens. For example, money (or a single unit of bitcoin) is fungible—each one unit is considered equal to any other unit of identical size. Conversely, artwork is not fungible—no two paintings are identical. Non-fungible tokens represent unique digital property, whether a collectible, artwork, intellectual property, or something else.

**Metaverse** is a network of 3D virtual worlds focused on social connection. This can include virtual reality, augmented reality, and the digital economy.

**Central Bank Digital Currency (CBDC)** is a digital version of a government-issued fiat currency that’s managed by a central bank.

**Web 3.0** is the third generation of the internet where technologies such as machine learning, decentralized ledgers, and artificial intelligence allow for a transparent environment that does not rely on central entities to manage and distribute content.

Data sources: Truist IAG, Galaxy Digital



# Digital glossary

## Digital technology concepts

**Digital asset** is any digital asset built using blockchain technology, including cryptocurrencies, stablecoins, non-fungible digital collectibles (NFTs) and security tokens.

**Exchanges** are platforms where you can buy and sell cryptocurrencies. Notable exchanges include Coinbase and Binance.

**Decentralization** is the process of removing intermediaries in a process and pushing power over a system out to the edges of the system, or to the users as a collective.

**Public ledger** is a transparent, distributed digital record of transactions that can be downloaded by anyone around the world.

**Blockchain** means a cryptographically secure digital ledger that maintains a record of all transactions that occur on the network and follows a consensus protocol for confirming new blocks to be added to the blockchain.

**Block** is a batch of confirmed transactions on the digital ledger. Blocks are added to an existing blockchain as transactions occur on the network. Miners are rewarded for “mining” a new block and sometimes awarded a token.

**Mining** is the process by which new blocks are created, and thus new transactions are added to the blockchain. The term “miner” typically refers to an entity that participates in block production on a Proof of Work network, whereas “validator” typically refers to an entity that participates in block production on a Proof of Stake network.

**Double spend** means the act of spending the same coin twice. If money can be double spent, it cannot function properly as it loses its scarcity and counterparties cannot trust that they alone have received payment. Solving the double-spend problem without the use of a central intermediary had never been accomplished until Bitcoin.

**Address** is a payment instruction for a digital asset. When receiving a payment, the recipient communicates their address to the payer, and the payer can send funds to that address.

**Wallet** is a tool that stores public and private keys and enables the user to use those keys to interact with a blockchain network. Wallets can be software, hardware, or physical (paper, metal, etc.).

**Cold storage** means the storage of private keys in any fashion that is disconnected from the internet. Common cold storage examples include offline computers, USB drives, or paper records.

**Private key** in asymmetric cryptography is a piece of data held in secret by an entity. It is used to compute digital signatures upon other data that can be verified by a third-party cheaply simply by knowing the public key.

**Public keys** are used with digital signatures to validate that the holder of a cryptocurrency coin did legitimately authorize the transfer of that coin to a new address or entity.

**Fork** is an event in open source software development when part of a community breaks away by making changes to the software.

Data sources: Truist IAG, Galaxy Digital

# Disclosures

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Investments into crypto currencies and/or digital assets are subject to material and high risk including the risk of total loss. The calculated prices may not be achieved by investors as the calculated price is based on prices from different trading platforms. Furthermore, an investment into crypto currencies and/or digital assets may become illiquid depending on the trading platform or investment product used for the specific investment. Investors should carefully review all risk factors disclosed by the relevant trading platform or in the product documents of relevant investment products.

**Asset classes are represented by the following indexes. An investment cannot be made directly into an index.**

U.S. Large Cap Equity is represented by the S&P 500 Index which is an unmanaged index comprised of 500 widely-held securities considered to be representative of the stock market in general.

Emerging Markets is represented by the MSCI Emerging Markets Index captures large and mid cap representation across 24 Emerging Markets (EM) countries. With 1,125 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI World ex USA Index captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries--excluding the United States. With 910 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

U.S. Core Taxable Bonds are represented by the Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).

The Bloomberg Barclays US Treasury Inflation-Linked Bond Index measures the performance of the US Treasury Inflation Protected Securities (TIPS) market. Federal Reserve holdings of US TIPS are excluded from the index.

Commodities are represented by the Bloomberg Commodity Index which is a composition of futures contracts on physical commodities. It currently includes a diversified mix of commodities in five sectors including energy, agriculture, industrial metals, precious metals and livestock. The weightings of the commodities are calculated in accordance with rules that ensure that the relative proportion of each of the underlying individual commodities reflects its global economic significance and market liquidity.

The Coin Metrics Bletchley Index **(CMBI) Bitcoin** is a cryptoasset benchmark designed to measure the performance an investor would expect from purchasing and holding Bitcoin. The benchmark represents a market aggregate USD value for Bitcoin. It aggregates data from the major global BTC/USD markets that conform to the Coin Metrics Market Selection Framework.

The Coin Metrics Bletchley Index **(CMBI) Ethereum** is a cryptoasset benchmark designed to measure the performance an investor would expect from purchasing and holding Ether. The benchmark represents a market aggregate USD value for Ether. It aggregates data from the major global ETH/USD markets that conform to the Coin Metrics Market Selection Framework.

The Coin Metrics Bletchley Index **(CMBI) Bitcoin and Ethereum** is a cryptoasset benchmark designed to measure the performance of a portfolio of Bitcoin and Ethereum, weighted by their free float market capitalization. It aggregates data from the major global BTC/USD and ETH/USD markets that conform to the Coin Metrics Market Selection Framework.

The **CMBI 10** is designed to measure the performance an investor would expect from investing in a diversified basket of crypto assets, weighted by their free float market capitalization. The 10 largest crypto assets, defined by an asset's expected 10 year future market capitalization, are selected as the index constituents.

The **CMBI 10 Even** offers an alternative to the CMBI 10 market cap weighted indexes. Even weighting strategies reflect the performance an investor would expect from investing an equal amount in a diversified basket of the largest crypto assets. Equal weighting is one of the oldest and best known methods of factor investing and aims to overcome weighting concentrating an index too heavily in a few large assets.

# Disclosures

The **CMBI 10 Excluding Bitcoin** is designed to measure the performance an investor would expect from investing in a diversified basket of the largest non-Bitcoin crypto assets, weighted by their free float market capitalization. As Bitcoin is often an investor's first exposure to crypto assets, the CMBI10EX was designed to provide a simple mechanism to diversify into other large cap crypto assets. The same constituents as the CMBI10, with the exception of Bitcoin, are selected as the index constituents.

The MVIS CryptoCompare Smart Contract Leaders Index is designed to track the performance of the largest and most liquid smart contract assets, and is an investable subset of MVIS CryptoCompare Smart Contract Index.

The MVIS CryptoCompare Decentralized Finance Leaders Index is designed to track the performance of the largest and most liquid decentralized finance assets, and is an investable subset of MVIS CryptoCompare Decentralized Finance Index.

The MVIS CryptoCompare Media and Entertainment Leaders Index is designed to track the performance of the largest and most liquid media & entertainment assets, and is an investable subset of MVIS CryptoCompare Media & Entertainment Index.

The MVIS CryptoCompare Infrastructure Application Leaders Index is designed to track the performance of the largest and most liquid infrastructure application assets, and is an investable subset of MVIS CryptoCompare Infrastructure Application Index.

The MVIS Global Digital Assets Equity Index tracks the performance of the largest and most liquid companies in the digital assets industry. This is a modified market cap-weighted index, and only includes companies that generate at least 50% of their revenue from digital asset services and products, such as exchanges, payment gateways, mining operations, software services, equipment and technology, digital asset infrastructure, or the facilitation of commerce with the use of digital assets. MVDAPP covers at least 90% of the investable universe.

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