

Around the block

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

July 11, 2022

Off the block

- A crypto winter became entrenched in the first half of 2022. Key crypto sectors fell over 70%. Even stablecoins were not left unscathed highlighted by the collapse of TerraUSD and Tether, the largest stablecoin, temporarily breaking its peg. Key catalysts behind the first half rout include:
 - Macroeconomic uncertainty with tightening financial conditions.
 - An equity bear market led lower by highly correlated technology shares.
 - Disruption in the DeFi (decentralized finance) sector spilling across the crypto ecosystem.
- The SEC rejected Grayscale’s bid to convert its Grayscale Bitcoin Trust into an ETF structure citing concerns for potential market manipulation and fraud. While not unexpected, this decision likely anchors the SEC’s opposition to spot-based ETF products without greater regulatory clarity from Congress. These regulatory efforts are likely to slow due to the congressional recess and mid-terms.

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



Industry developments

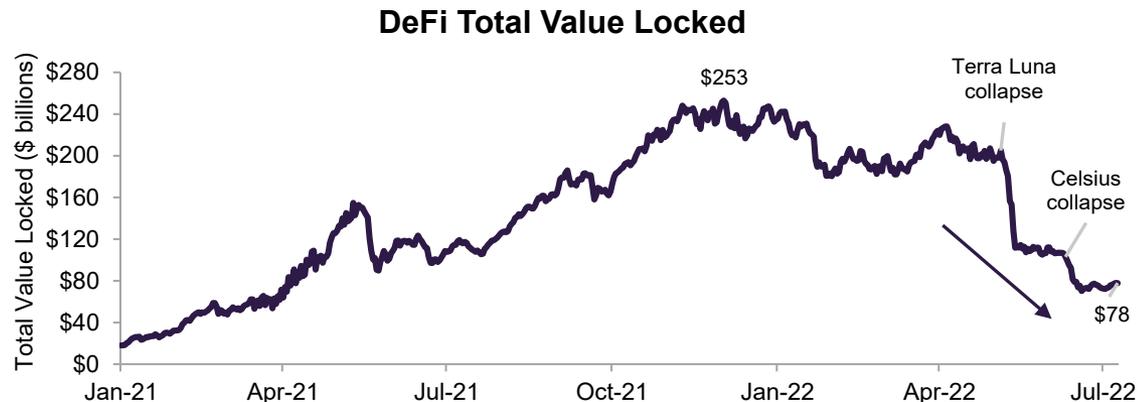
- Crypto miner Core Scientific highlights a list of crypto miners selling bitcoin to purchase equipment and pay down debt.
- Big Four accounting firm, KPMG, opened a metaverse collaboration hub connecting its employees and clients with Web 3.0.
- eBay acquired KnownOrigin, an NFT marketplace allowing artists and collectors to transact authenticated digital items.

Regulatory developments

- The SEC rejected Grayscale Bitcoin Trust’s proposed conversion to an ETF structure.
- A bi-partisan draft of the Responsible Financial Innovation Act was released addressing key regulatory priorities.
- The U.S. Treasury issued its framework for international engagement on digital asset oversight on July 7th.

Chart of the month – DeFi Sector under attack

Decentralized finance (DeFi) provides peer-to-peer financial services to participants utilizing blockchain technology. Total Value Locked (TVL) measures the value of crypto tokens deposited by investors for purposes of earning a return. It is loosely analogous to deposits in a traditional banking context and has declined roughly 70% from its 2021 peak.



Data sources: Truist IAG, DeFi Llama

Investment and Insurance Products:

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

Wealth

Performance monitor (6/30/2022)

Crypto and traditional indices

Bitcoin/Ethereum	Composition	1 Mo	YTD	1 Yr
CMBI Bitcoin		-40.3%	-58.8%	-45.6%
CMBI Ethereum		-47.4%	-71.9%	-54.1%
CMBI Btc/Eth		-42.5%	-63.9%	-48.5%
Diversified Baskets				
CMBI 10 Cap Wgt	cap weight	-41.0%	-66.4%	-52.0%
CMBI 10 Even Wgt	equal weight	-32.2%	-71.2%	-57.4%
CMBI ex-bitcoin	CMBI 10 - BTC	-42.1%	-73.8%	-59.1%
MVIS CryptoCompare DA 10	30% coin cap	-38.6%	-68.3%	-51.1%
MVIS CryptoCompare DA 25	20% coin cap	-35.0%	-70.9%	-50.5%
MVIS Sector Leaders				
Smart Contracts		-36.7%	-76.0%	-53.0%
DeFi		-38.1%	-77.0%	-75.2%
Media and Entertainment		-32.1%	-84.3%	-59.1%
Infrastructure		-29.8%	-79.7%	-74.3%
Equities				
NYSE Factset Global Blockchain	digital equities	-32.8%	-70.6%	-73.4%
MVIS Global Digital Assets Equity	digital equities	-41.3%	-76.7%	-82.2%
S&P 500		-8.3%	-20.0%	-10.6%
MSCI World ex USA		-9.4%	-18.8%	-16.8%
MSCI EM		-6.7%	-17.6%	-25.3%
Fixed Income				
Bloomberg US Agg Bond		-1.6%	-10.4%	-10.3%
Bloomberg US Treasury US TIPS		-3.2%	-8.9%	-5.1%
Commodities				
Bloomberg Commodity		-10.8%	18.4%	24.3%
SPDR® Gold Shares		-1.2%	-0.4%	2.6%

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

Crypto assets month in review

June saw the two dominant cryptocurrencies, bitcoin and ethereum, lead a broader drawdown across the entire ecosystem. This was in contrast to prior months where crypto markets were led lower by smaller altcoins (all coins except bitcoin). Ongoing destabilization in the DeFi sector from last month's TerraLuna collapse carried forward to this month with Celsius and other lending protocols experiencing severe turbulence.

Ethereum was the weakest of the Top 25 coins (slide 5) shedding 47% of its value associated with systemic challenges across the broader DeFi (decentralized finance) sector and the delay of its conversion to Proof of Stake validation. Several DeFi lending protocols, led by Celsius, prohibited investor withdrawals sending shockwaves across the whole ecosystem.

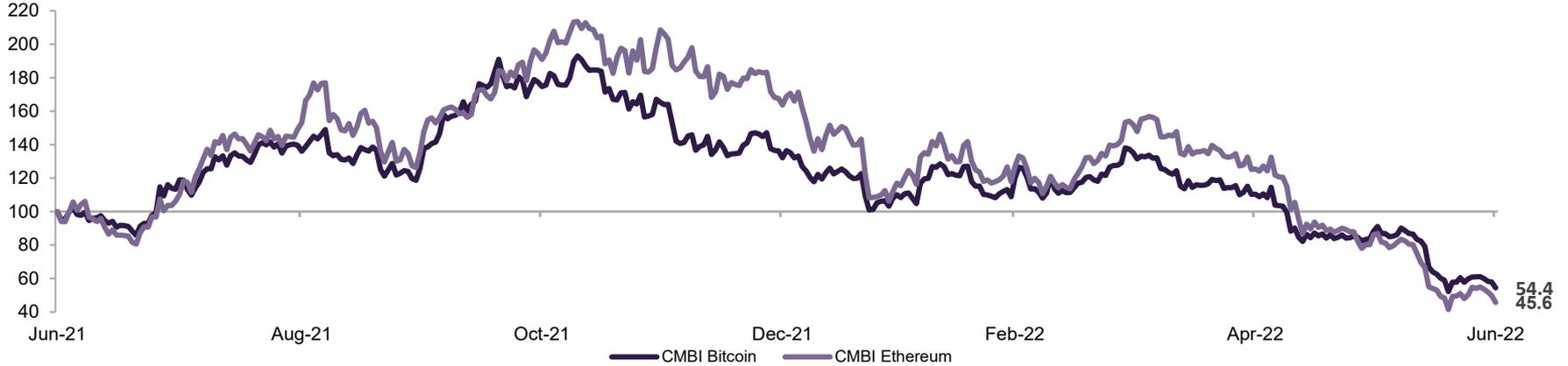
Bitcoin prices remain under pressure which has caused several public and private companies alike to sell bitcoin reserves to fund operations and service debt collateralized by bitcoin. We believe this is in part a sentiment trade due to the fact only 2.1% of bitcoin supply is held by public and private companies combined.

Notable callouts for the month:

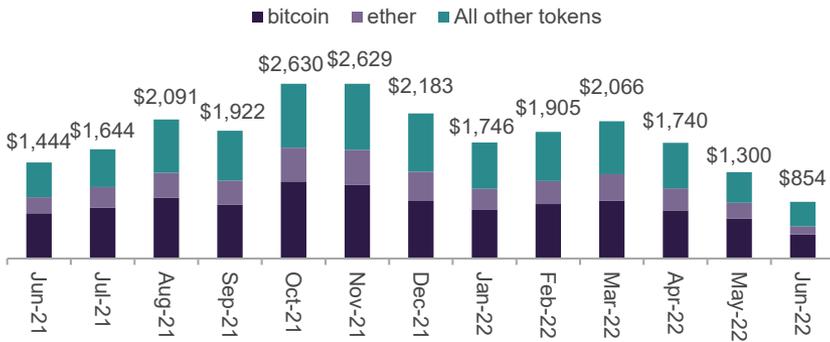
- Bitcoin and ethereum's combined market cap dominance shrunk in June from 65% to 57% of the total crypto market cap in an unusually volatile month.
- Diversified baskets: relative strength was observed in the CMBI (Coin Metrics Bletchley Indices) even-weighted segment due to the more severe drawdowns in the dominant coins such as bitcoin and ethereum.
- The decentralized finance (DeFi) sector experienced pronounced weakness due to a liquidity crunch that left several lending protocols struggling to survive.

Cryptocurrency ecosystem snapshot as of 6/30/22

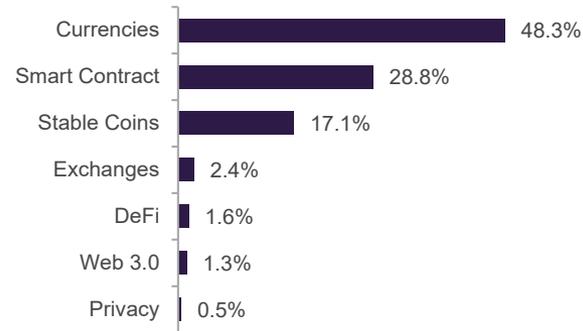
Bitcoin and ether 1-year indexed returns



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



Cryptocurrency ecosystem sector composition

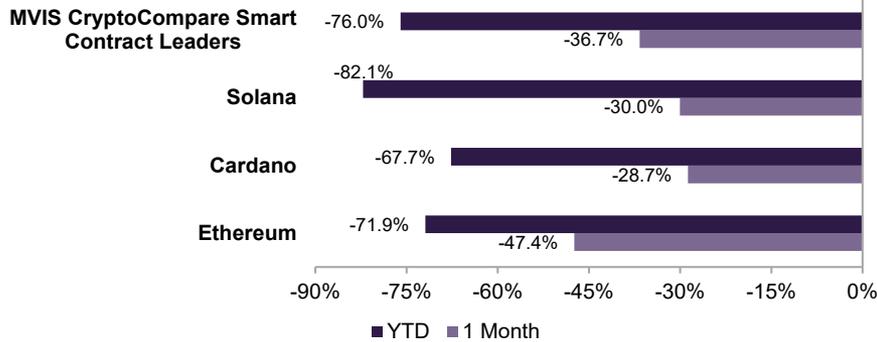


Data sources: Truist IAG, CoinMetrics, Messari

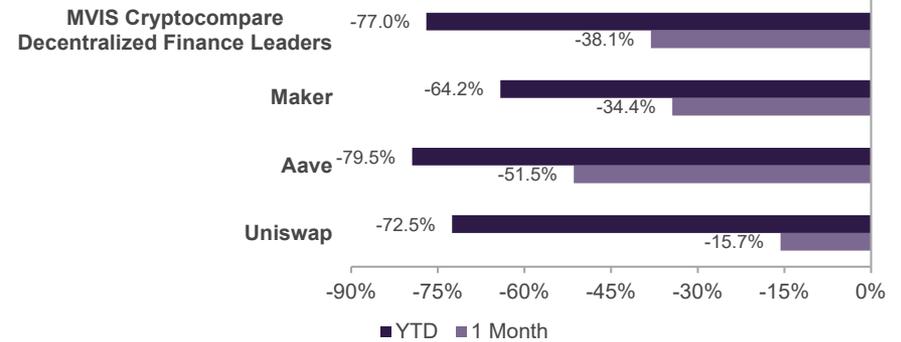
Key crypto sectors 6/30/22

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

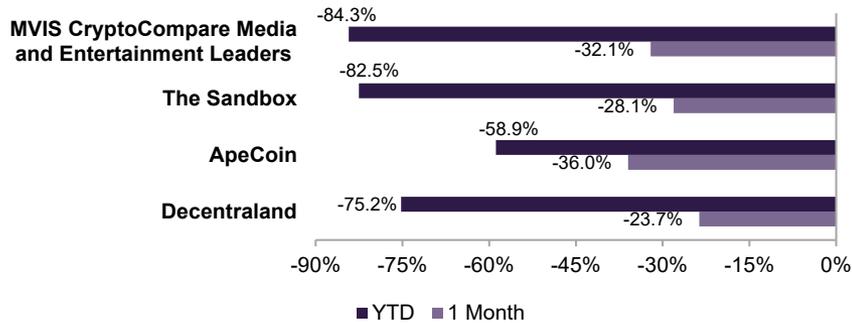
Smart contract index and top 3 tokens



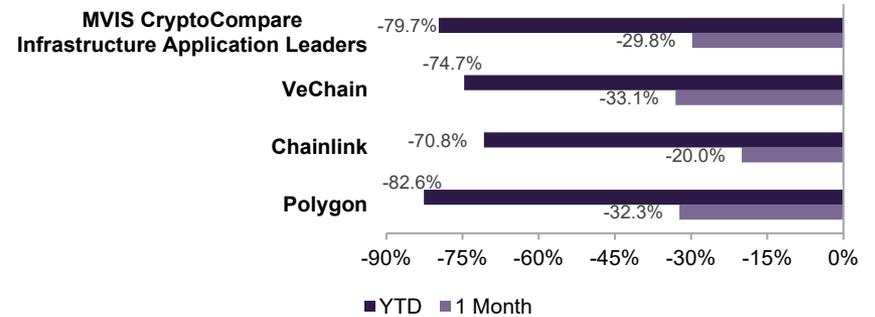
DeFi index and top 3 tokens



Metaverse index and top 3 tokens



Infrastructure index and top 3 tokens



Data sources: Truist IAG, MVIS CryptoCompare, Messari, Morningstar. Data as of 06/30/22.

See disclosures for more on index definitions and methodology.

June 2022 top 25 tokens by market cap

Top 25 cryptocurrencies and top five stablecoins:
92% of total crypto market cap

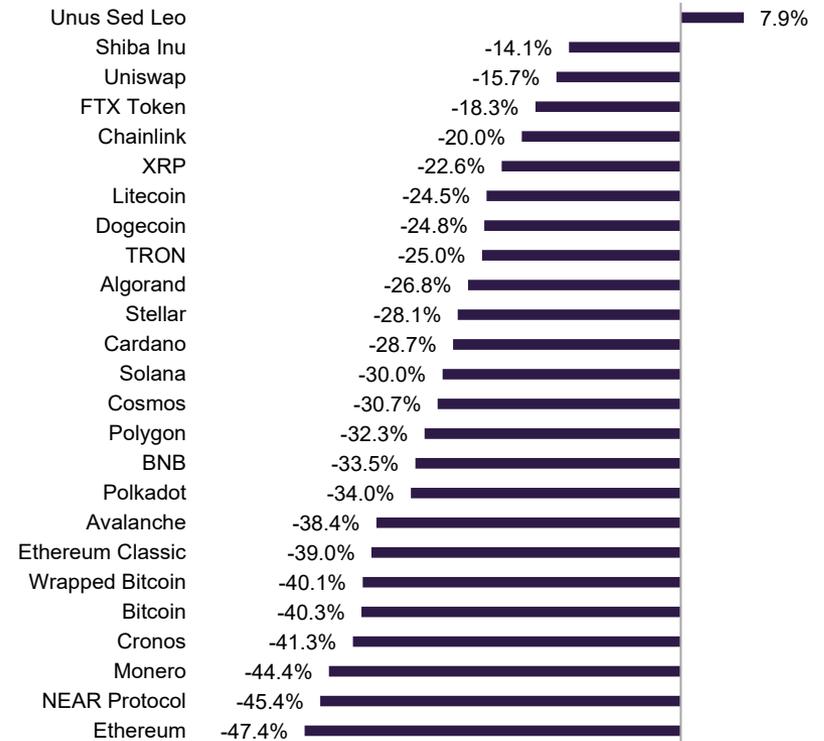
Rank	Name	Symbol	Sector	Mkt Cap (\$billions)	Mkt Cap Dominance	Cumulative Mkt Cap Dominance
1	Bitcoin	BTC	Currencies	\$ 360.3	42.2%	42.2%
2	Ethereum	ETH	Smart Contract Platforms	\$ 123.4	14.5%	56.7%
3	BNB	BNB	Centralized Exchanges	\$ 34.6	4.0%	60.7%
4	XRP	XRP	Smart Contract Platforms	\$ 15.6	1.8%	62.5%
5	Cardano	ADA	Currencies	\$ 15.0	1.8%	64.3%
6	Solana	SOL	Smart Contract Platforms	\$ 10.9	1.3%	65.6%
7	Dogecoin	DOGE	Currencies	\$ 8.5	1.0%	66.6%
8	Polkadot	DOT	Smart Contract Platforms	\$ 6.7	0.8%	67.4%
9	TRON	TRX	-	\$ 5.8	0.7%	68.0%
10	Unus Sed Leo	LEO	Smart Contract Platforms	\$ 5.5	0.6%	68.7%
11	Shiba Inu	SHIB	Smart Contract Platforms	\$ 5.5	0.6%	69.3%
12	Wrapped Bitcoin	WBTC	-	\$ 5.0	0.6%	69.9%
13	Avalanche	AVAX	Scaling	\$ 4.6	0.5%	70.4%
14	Litecoin	LTC	Centralized Exchanges	\$ 3.6	0.4%	70.9%
15	Polygon	MATIC	Currencies	\$ 3.6	0.4%	71.3%
16	Uniswap	UNI	Payment Platforms	\$ 3.5	0.4%	71.7%
17	FTX Token	FTT	Smart Contract Platforms	\$ 3.2	0.4%	72.1%
18	Chainlink	LINK	Decentralized Exchanges	\$ 2.8	0.3%	72.4%
19	Cronos	CRO	Centralized Exchanges	\$ 2.8	0.3%	72.7%
20	Stellar	XLM	Currencies	\$ 2.7	0.3%	73.0%
21	NEAR Protocol	NEAR	Currencies	\$ 2.3	0.3%	73.3%
22	Algorand	ALGO	Currencies	\$ 2.1	0.2%	73.6%
23	Cosmos	ATOM	Data Management	\$ 2.0	0.2%	73.8%
24	Monero	XMR	Smart Contract Platforms	\$ 2.0	0.2%	74.0%
25	Ethereum Classic	ETC	Smart Contract Platforms	\$ 2.0	0.2%	74.3%

Top 5 Stablecoins

Tether	USDT	Stablecoins	\$ 66.7	7.8%	7.8%
USD Coin	USDC	Stablecoins	\$ 55.8	6.5%	14.4%
Binance USD	BUSD	Stablecoins	\$ 17.5	2.1%	16.4%
Dai	DAI	Stablecoins	\$ 6.8	0.8%	17.2%
FRAX	FRAX	Stablecoins	\$ 1.3	0.2%	17.4%

Top 25 June 2022 Performance Rankings

Top 25 Tokens MTD Returns (6/30/22)



Data sources: Truist IAG, Messari

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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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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