



DIGITAL ASSET MANAGEMENT REVIEW

NOVEMBER 2022



About CryptoCompare

Compare is an FCA authorised benchmark administrator and global leader in digital asset data, providing institutional and retail investors with high-quality real-time and historical data. Leveraging its track record of success in data expertise, CryptoCompare's thought-leadership reports and analytics offer objective insights into the digital asset industry.

About This Report

Bitcoin has proven itself to be a viable asset class with which investors can diversify their portfolios. Over the last few years, it has attracted significant attention from investors in the traditional markets. With its limited supply schedule that cannot be manipulated by any central government, it has become a popular asset class for those concerned about inflation and monetary expansion in a post-Covid world.

On the whole, regulatory frameworks for exchanges and cryptocurrency are becoming clearer. However, compared to traditional asset classes, digital asset markets have a long way to go before more risk-averse investors are fully at ease.

Institutional investors looking to gain regulated exposure to digital assets are likely to turn to the growing number of crypto investment products, such as ETNs and ETFs, that have gained popularity over the last couple of years across Europe and the US. These products make crypto more accessible to investors because they can be traded on traditional stock exchanges, with the complexities of custody and storage abstracted away from the end user.

Given the rapid rise of available products and the lack of clarity around the size and characteristics of the major market players, CryptoCompare's Digital Asset Management Review aims to provide an overview of the global digital asset investment product landscape. Our review focuses on key developments across various product types and tracks the adoption of these products by analysing assets under management, trading volumes and price performance.

This review is conducted on a monthly basis and caters to institutional investors, analysts and regulators. For questions related to this research or any potential requests, feel free to contact CryptoCompare's research department at research@cryptocompare.com.

Data Sources

Financial Times, 21Shares, Coinshares, XBT Provider, Grayscale, OTC Markets, HanETF, Yahoo Finance, 3iQ, Purpose, VanEck, ByteTree, Nordic Growth Market, Bloomberg, CryptoCompare



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Key Market Insights

Digital Asset Management Firms Suffer After Rising Concerns of Exposure to FTX

In November, digital asset management firms saw their AUM decline by an average of 14.5%, the lowest monthly AUM recorded since December 2020. This decline was fuelled by fears surrounding the exposure that those firms have to FTX and the implications of the recent incidents on market stability. One major concern was regarding the exposure that Digital Currency Group (DCG) and Genesis Trading – the parent company and the sister company of Grayscale, respectively – had to FTX, and the implications this could have on the broader market.

BTC & ETH Short Products Inflows Spike

Average weekly inflows saw a notable rise in November, driven by the increased interest in BTC & ETH short-investment products. This signifies the negative sentiment caused by the collapse of FTX, and the market expectation of further price drops. Short Bitcoin products averaged net flows of \$8.30mn in November, accounting for 60.7% of all positive net flows.

Trust Products' Volumes Spiked After Five Months of Decline

Average daily aggregate product volumes across all digital asset investment products saw a significant rise of 127% to \$139mn in November; the highest volumes recorded since June 2022, breaking the downward trend in volumes since May 2022. Grayscale's Bitcoin trust product (GBTC) recorded an average daily volume of \$72.9mn, a 155% increase compared to October, while the Grayscale Litecoin-based product LTCN recorded the highest increase in volumes of 428% to \$450k.



Latest Digital Asset Investment News

COMPANY	STORY	DATE
ETC Group	ETC Group to close proof-of-work Ethereum ETP six weeks after launch	November 2 nd
BlackRock	Circle Begins Putting Reserves Into New BlackRock Fund	November 3 rd
CoinShares	CoinShares says has \$30.3 million exposure to FTX	November 10 th
21Shares	SEC pushes deadline to decide on ARK 21Shares spot Bitcoin ETF to January 2023	November 15 th
Grayscale	Grayscale Discount' Widens to Record 43% as FTX Contagion Spreads	November 18 th
3iQ	3iQ, Coinbase Custody and Tetra Trust Complete Custodianship <u>Transition</u>	November 22 nd



Definitions

In the current review, we have defined the major available products types as follows:

ETF - Exchange Traded Fund Exchange traded open-ended fund that trades like an equity

ETN - Exchange Traded Note Fully collateralised open-ended debt security

Trust - Listed/OTC-Traded Trust Closed-ended investment fund established as a trust

ETC - Exchange Traded Certificate Synthetic exchange traded bearer note

An Exchange-Traded-Fund (ETF) is a type of financial instrument consisting of a collection of securities (e.g. stocks) and is priced relative to the underlying assets on which it is based – usually via an index. In the case of Bitcoin, a Bitcoin ETF would consist of units of Bitcoin – valued based on a Bitcoin index (e.g., MVBTC). The units of this fund can be easily traded on exchanges like stocks can. It is usually passively managed and open-ended (i.e., there is no limit to the number of shares that can be created). Physical ETFs hold the underlying assets that the fund tracks.

An Exchange Traded Note (ETN) is similar to an ETF in the sense that it can be easily traded on exchanges. A major distinction between the two is that you don't own the underlying for an ETN - it is a debt security backed by a bank or institution and usually comes in the form of a bearer certificate. An investor can invest their cash in this product and is entitled to returns based on the changing value of the underlying assets on which it is based. These products generally have fewer regulatory collateral requirements compared to ETFs and can be fully collateralised or unsecured. In this case, we will define an ETN as a physically-backed (collateralised) debt security.

An **Exchange Traded Certificate (ETC)** or Synthetic ETN is a type of non-interest-bearing debt instrument in the form of a bearer certificate that tracks the behaviour of an underlying asset class using derivatives 1: 1. The investor does not necessarily own or is entitled to the underlying asset on which the product is built, but is entitled to returns. These products are largely uncollateralised.

An **Investment Trust** is a type of closed-ended fund set up as a company, such that its shares can be bought and sold on an exchange or OTC market. This investment trust invests in a portfolio of assets, and hence the value of the share of the company is tied to the value of the underlying assets that it holds. Given that it is closed-ended, the NAV of each share can decouple from their market prices.

Disclaimer

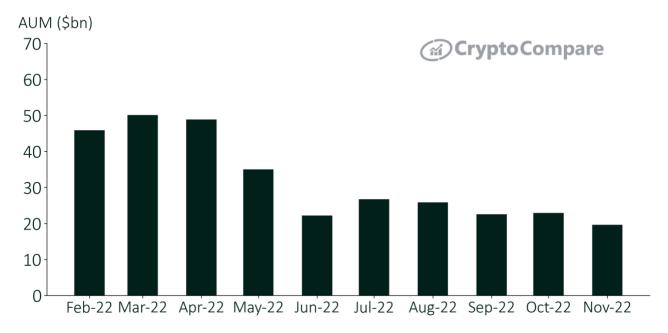
Due to the nature of API endpoints and backfilling of data by exchanges, there may be discrepancies in data between previous reports. This data is correct up to the date of the current release of the report.



AUM - Assets Under Management

In November, the total AUM across all digital asset investment products witnessed a sharp decline of 14.5% to \$19.6bn, recording the lowest monthly AUM since December 2020 (as of the 28th of November). The decline reflects the market panic amid FTX's collapse and the expectations of further drops ahead. AUM is currently down 55.3% from the beginning of 2022.

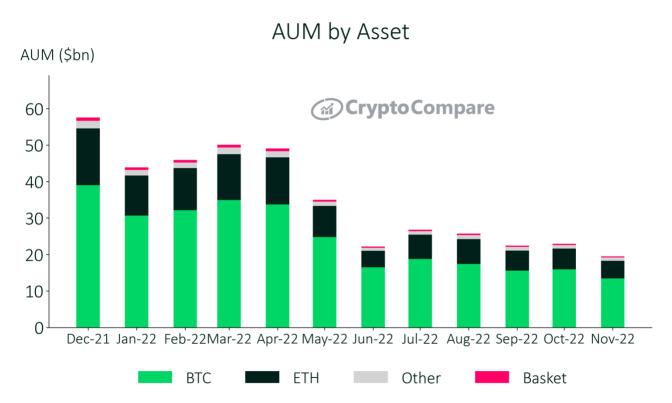
Monthly AUM - Aggregate Exchange and OTC-Traded Products



In November, Bitcoin's AUM fell 15.9% to \$13.4bn, the largest drop since June 2022. Its market share also saw a slight drop of 0.96% to 68.9% of total AUM, down from 74.3% in June. Ethereum's AUM fell 14.6% to \$4.85bn while 'Other' and 'Baskets' AUM fell 4.36% to \$901mn and 14.1% to \$297mn, respectively.

Ethereum investment product market share increased for the second month in a row, recording 24.9% of total AUM. The decline in both Bitcoin's and Ethereum's absolute AUM made 'Other' and 'Basket' AUM record their highest market share of 4.62% and 1.53% since March 2021 and April 2022, respectively.



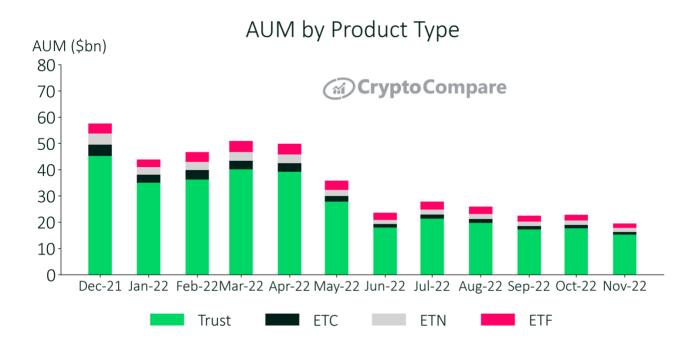


Despite their exposure to FTX and the rising concerns surrounding Digital Currency Group (DCG - Grayscale's parent company), Grayscale continued to dominate AUM, with products recording a total AUM of \$14.7bn (75.5% of total) followed by those of XBT Provider at \$1.03bn (5.27% of total) and 21Shares at \$844mn (4.33% of total).

Regarding product type, AUM in trust products (dominated by Grayscale) fell by 13.6% to \$15.3bn (78.3% of total AUM).

AUM represented by ETFs also saw a significant fall of 23.9% to \$1.68bn in November, representing 8.64% of the total market share. As of November, the market share of ETFs has fallen 24.9% since its 2022 peak in June. ETFs are followed by ETNs and ETCs in terms of market share, with these recording market shares of 7.74% and 5.27%, respectively.

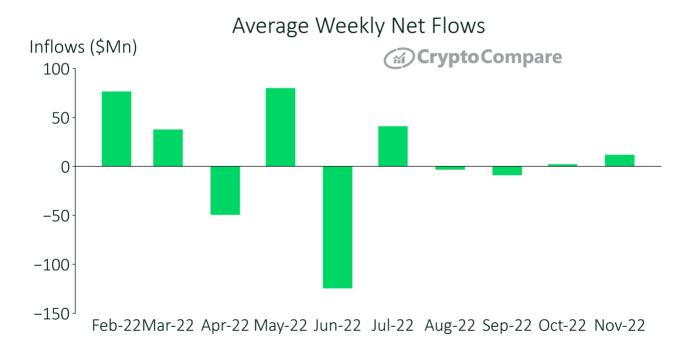




Net Flows

November saw a huge spike in weekly net flows after a soft month of October, with a 471% increase in weekly net flows to an average of \$11.9mn.

The increase followed the collapse of FTX, which led to a significant number of withdrawals (outflows) as market participants looked to alternate means of custody. This trend was accompanied by a huge increase in inflows into BTC and ETH short-products, signalling the bearish sentiment of traders and the likelihood of further drops in asset prices.

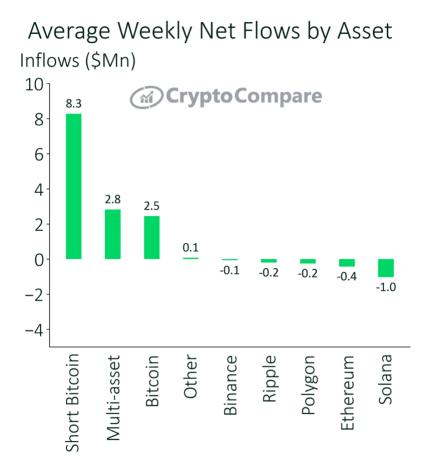




Weekly flows for Bitcoin-based products continued to be positive for the third month in a row, averaging \$2.45mn in November; a 33.3% and 74.5% drop compared to the net flows of September and October, respectively.

Ethereum products, on the other hand, recorded negative net flows of \$0.43mn, continuing the asset's streak of negative net flows, which started in September following the Ethereum Merge.

The largest net flows were recorded by the Short Bitcoin-based products, which averaged \$8.30mn of flows per week, followed by the multi-asset-based product, which averaged \$2.80mn.



Trust Products

The majority of AUM in trust products continued to reside in Grayscale's Bitcoin (GBTC - \$10.5bn-down 14.8% since October) and Ethereum (ETHE - \$3.65bn - down 11.0% since October) products. The two products recorded a 92.4% market share of all Trust Products analysed in this report in November.

Other high AUM trust products include Bitwise's index product (BITW) and Grayscales index product (ETCG), which fell 15.7% to \$307mn and 12.3% to \$237mn, respectively.



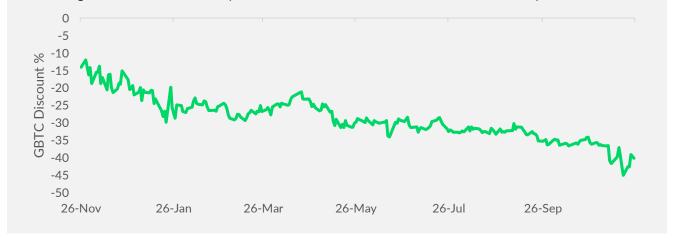
Grayscale's Bitcoin Fund Hits a Record Discount of 45.1% Following FTX Collapse

Since February 2021, the entire crypto market has been watching closely as the GBTC discount increases and market stability declines. The discount represents the gap between the security price and the Net Asset Value (NAV) of the underlying BTC held by the trust.

The reason for GBTC's heavy discount is simple – GBTC offers no path to redemption, where holders cannot exchange a GBTC share for the underlying asset held by the Trust. Typically, redemption mechanisms creates a 'no arbitrage' principle where, if GBTC deviates from the underlying value, holders can exchange a share for the underlying BTC held in the trust and pocket a small profit, thereby correcting the price of GBTC in the process. However, with no opportunity to redeem GBTC for underlying holdings, the only solution for holders willing to exit the position is to sell their shares. This sell side pressure leads to a deviation in the price of GBTC compared to BTC.

Following FTX's liquidity problems on the 8th of November, GBTC's discount saw an increase of 12.0%, followed by further increases leading to the discount reaching an all-time high of 45.1% on the 18th of November.

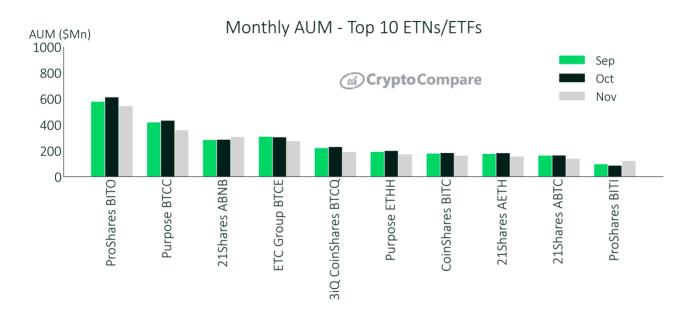
Many have seen this incident as an opportunity to buy what they perceive to be 'the bottom', leading the trading volumes of GBTC to spike to a record \$72.9mn, a 155% increase compared to October.





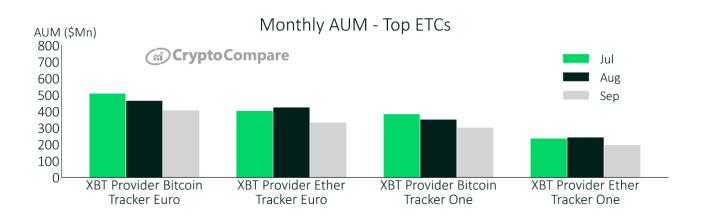
Exchange Traded Notes (ETNs) and Exchange Traded Funds (ETFs)

In November, ProShares BITO product continued to hold the highest AUM in an ETN/ ETF product with \$545mn. This was followed by Purpose's BTCC and 21Shares's ABNB products, with the former falling 17.0% to \$360mn and the latter falling 6.99% to \$308mn. This is the first time that 21Shares ABNB product has surpassed ETC's BTCE product, which saw its AUM fall 9.90% to \$276mn.



Exchange Traded Certificates (ETCs)

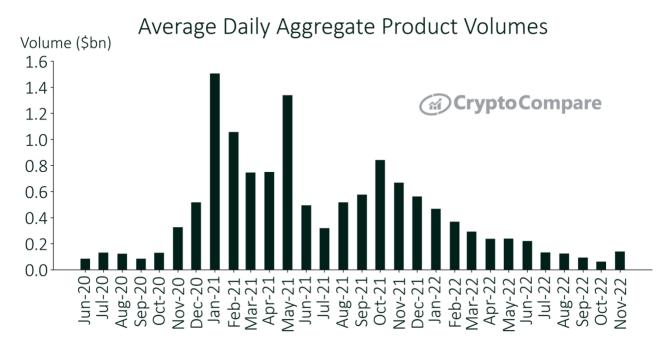
XBT Provider by CoinShares represents the majority of AUM across all ETCs. Its Bitcoin Tracker Euro product continues to retain the top spot for highest AUM amongst ETCs in November, despite a sharp decline of 24.9% to \$314mn and a deterioration in market share to 30.6%; the lowest market share since December 2021. This was followed by the Ether Tracker Euro product, which fall 20.7% to \$279mn.





Trading Volumes

Average daily aggregate product volumes across all digital asset investment products saw a significant rise of 127% to \$139mn in November; the highest volumes recorded since June 2022, breaking the downward trend volumes have witnessed since May 2022. This is explained by the significant rise in trading activity caused by FTX-related events.



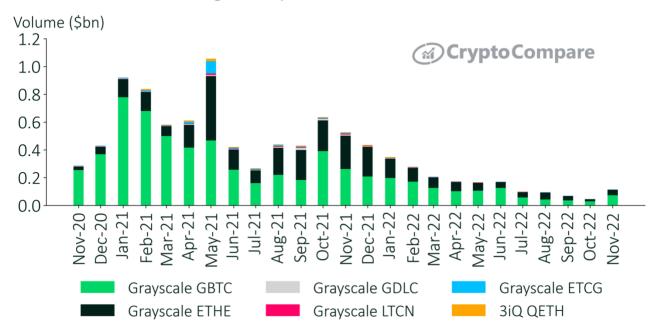
Trust Products

Grayscale's Bitcoin trust product (GBTC) continued to dominate the Trust Product market despite hitting a record discount. In November, the average daily volume of the fund recorded \$72.9mn; a 155% increase compared to October, the first increase after 4 months of continuous decline.

Grayscale's Ethereum product recorded an average daily volume of \$39.5mn; a 155% increase compared to October. Other major trust products, such as 3iQ's Bitcoin product (QBTC) saw average daily volumes rise by 139% to 994k, whilst their Ethereum product (QETH) saw average daily volumes rise to \$551k; a 72.3% increase. The Grayscale Litecoin-based product LTCN recorded the highest increase in volumes of 428% to \$450k.



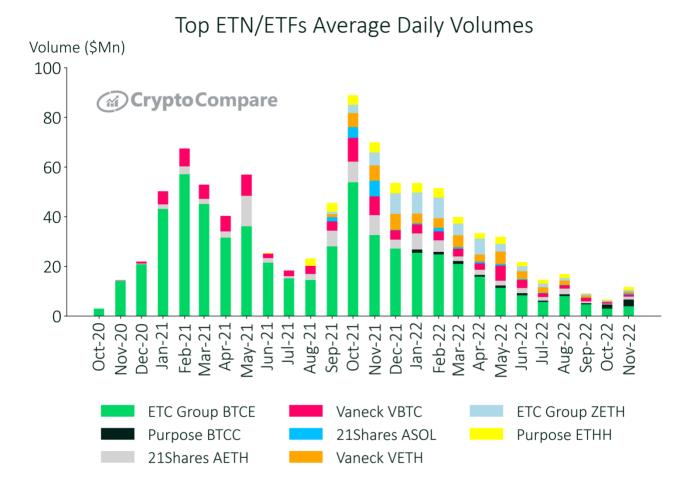
Average Daily Trust Product Volumes



Exchange Traded Notes (ETNs) and Exchange Traded Funds (ETFs)

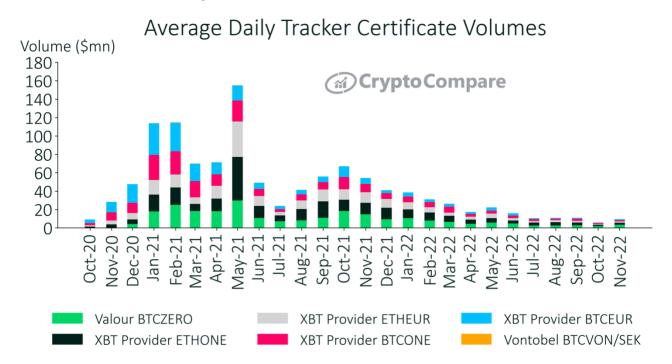
Bitcoin trading continued to dominate ETNs/ETFs in November, with ETC Group's BTCE product trading the highest daily volume at \$3.91mn (up 34.6%), followed by Purpose's Bitcoin product (BTCC) at \$2.66mn (up 58.3%), and 21Shares's Ethereum product (AETH) at \$1.23mn (up 245%).





Exchange Traded Certificates (ETCs)

Valour's Bitcoin product (BTCZERO) continued to dominate ETCs average daily volumes, leaving XBT Tracker's Ether Tracker One (ETHONE) in second place. Each recorded \$3.33mn (up 60.1%) and \$2.25mn (up 62.9%) in average daily volumes respectively.





Price Performance & Product Information

PRODUCT	PRODUC T TYPE	TRADING TYPE	AVG DAILY VOLUME (\$) 30-DAY	% AVG DAILY VOLUME CHANGE	30-DAY RETURNS
GRAYSCALE GBTC	Т	OTC-TRADED	72894155.1	105%	-24.8%
GRAYSCALE ETHE	Т	OTC-TRADED	39537487.95	71.7%	-36.3%
ETCGROUP BTCE	ETN	EXCHANGE-TRADED	3907072.579	20.2%	-22.7%
PURPOSE BTCC	ETF	EXCHANGE-TRADED	2656448.702	33.0%	-18.2%
XBTPROVIDER XETHONE	ETC	EXCHANGE-TRADED	2254566.79	20.4%	-33.0%
XBTPROVIDER XETHEUR	ETC	EXCHANGE-TRADED	1430376.51	44.5%	-33.4%
XBTPROVIDER XBTCONE	ETC	EXCHANGE-TRADED	1314507.377	-3.7%	-28.7%
21SHARES AETH	ETN	EXCHANGE-TRADED	1232405.784	142%	-27.4%
PURPOSE ETHH	ETF	EXCHANGE-TRADED	1183517.797	90.1%	-23.1%
XBTPROVIDER XBTCEUR	ETC	EXCHANGE-TRADED	1139230.048	117%	-28.2%
21SHARES SBTC	ETN	EXCHANGE-TRADED	1063038.23	-7.5%	18.2%
3IQ QBTC	Т	EXCHANGE-TRADED	994047.8499	98.0%	-24.8%
VANECK VETH	ETN	EXCHANGE-TRADED	864279.995	53.9%	-29.6%
GRAYSCALE ETCG	Т	OTC-TRADED	858280.35	64.0%	-33.1%
VANECK VBTC	ETN	EXCHANGE-TRADED	794109.6436	23.3%	-25.0%
GRAYSCALE GDLC	Т	OTC-TRADED	690418.05	101%	-32.6%
21SHARES ABTC	ETN	EXCHANGE-TRADED	661330.5669	-14.0%	-21.5%
3IQ QETH	Т	EXCHANGE-TRADED	551253.8396	43.3%	-28.9%
ETCGROUP ZETH	ETN	EXCHANGE-TRADED	546180.5886	24.3%	-29.0%
COINSHARES BITC	ETF	EXCHANGE-TRADED	537744.9013	124%	-25.0%
BTC/USD	CCCAGG INDEX	CRYPTOCOMPARE			-20.9%
ETH/USD	CCCAGG INDEX	CRYPTOCOMPARE			-25.8%
MVDA Index	MVIS INDEX	MVIS			-19.1%

In November, all asset management products analysed in this report had a negative performance, with the only exception being 21Sahres Short BTC (SBTC) which recorded a 30-day return of 18.2%. ETH-based products led the downward with declines ranging from -23.1% to -36.3%. Grayscale's ETHE Trust product was the worst performer of the month with, a drop of 36.3%. BTC-based saw a similar hit with declines ranging from -21.5% to -28.7%.

The MVDA index experienced a decline of 19.1%. The MVDA index is a market cap-weighted index that tracks the performance of a basket of the 100 largest digital assets. The index serves as a benchmark and universe for the other MVIS CryptoCompare Digital Assets Indices.



PROVIDER	FEE RANGE	CHEAPEST FUND AVAILABLE	FUNDS AVAILABLE
Grayscale	2.00% - 3.00%	Grayscale® Bitcoin Trust	17
21Shares	1.49% - 2.50%	21Shares Bitcoin ETP, Ethereum ETP	39
XBTProvider	2.50%	Tracker Products	4
ETC Group	1.49% - 2.00%	Ethereum ETC	14
Valour	0.00% - 1.90%	Bitcoin Zero, Ethereum Zero	12
Purpose	1.00%	Purpose Bitcoin ETF	5
3IQ	0.75% - 1.95%	3iQ Global Cryptoasset Fund	6
VanEck	1.00%	VanEck Bitcoin ETN	13
WisdomTree	0.95%	WisdomTree Bitcoin ETF	7
Bitwise	0.85% - 2.00%	Bitwise Crypto Industry Innovators ETF	12

CryptoCompare Index Products

The MVIS CryptoCompare Digital Assets Indices track the financial performance of the largest and most liquid digital assets and serve as the underlying platform for financial products globally. See all available indices here. Get in touch to learn more about how our indices can help you build innovative products. The MVIS CryptoCompare Digital Assets Indices can be licensed to clients for a variety of purposes, including:

- Performance measurement and attribution
- Investment product development is the basis for structured products such as ETNs and futures contracts.
- Asset Allocation
- Research

CryptoCompare Indices in the News

On September 28, CryptoCompare and Blockdaemon, the leading institutional-grade blockchain infrastructure company for node management and staking, announced the **launch of their industry-first family of Staking Yield Indices**, **enabling** more informed and sophisticated investment strategies in a regulated and secure environment.

The CryptoCompare Blockdaemon Staking Yield Index Family is designed to measure the annualised daily staking yield generated by the digital asset, allowing institutional investors to create total return and yield swap products, benchmark portfolios, conduct research, and more. The Index Family will initially feature five regulated indices that capture the annualised daily staking yield of the top-performing PoS digital assets: Avalanche, Cardano, Cosmos, Polkadot, and Solana. Learn more here.



Access More of Our Research and Insights

As the digital asset markets continue to grow, so does the need for high-quality research that brings greater clarity and transparency to this rapidly evolving industry. CryptoCompare's suite of research reports provides market participants with trusted, high-quality data and analysis.

Recurring Reports:

Report	Description
Exchange Review	Captures key developments within the cryptocurrency exchange market — providing readers with an in-depth analysis of exchange volumes, trading activity, and derivatives open interest.
Digital Asset Management Review	Tracks and analyses the most innovative institutional products in the industry, assessing volumes, assets under management (AUM), and product flow trends.
Exchange Benchmark	Brings clarity to the crypto asset exchange sector. Two years on, it has become the industry standard for assessing and evaluating cryptocurrency exchanges, with the methodology and rankings now being utilised to help create financial products and indices.
Asset Report	Provides professionals in the financial services space, particularly the investment management industry, with a summarised analysis of the latest movements in five of the largest cryptocurrencies.
Market Outlooks	A quarterly report that identifies the most important developments of the last quarter, which may thereafter set the tone for key trends to look out for in the following months. This includes references to the macroeconomic environment, DeFi, NFTs, stablecoins, and more.

Topic Deep Dives:

Report	Description
Liquidity Report	Created in collaboration with Bitstamp $-$ a first of its kind report $-$ it examines the intricacies of digital asset liquidity and compares it across top-tier exchanges to find the true liquidity of digital asset exchanges.
UST's Fall From Grace	Summarises the depegging of UST and the subsequent debacle of LUNA and the Terra ecosystem, including an analysis of the ripple effects of the event and where it situates the digital asset industry.