CERULLI ASSOCIATES

Cryptocurrency: Navigating a Frontier Asset Class for Advisors and Asset Managers

It's about time for asset managers and advisors to have a view on the emerging asset class

February 2022

Summary

As cryptocurrency continues to be a topic of conversation, financial advisors who ignore the asset class due to lack of belief or knowledge may find their clients turning elsewhere for advice. While the decision may stand that they will not incorporate cryptocurrency into their portfolio management and planning decisions, financial advisors must develop an understanding of the opportunities in order to form a well-founded reasoning for why cryptocurrency is not suitable for their clients. This paper explores reasons why advisors are or are not adopting cryptocurrency as part of their offering, and dives into product development trends that are delivering standards, investment vehicles, and strategies for exposure to the asset class.

KEY TAKEAWAYS

- The cryptocurrency landscape has its own array of key metrics, terminology, and operating structure that are far different than what is commonly known through traditional finance.
- Portfolio exposures to both alternative investments and cryptocurrencies are expected to rise over the next two years, according to advisors.
- Nearly half of advisors indicate they expect to use cryptocurrencies by client request at some point in the future.
- Some advisors indicate the time commitment to understand the cryptocurrency market as a reason they're staying away, while others believe that they would be breaching their fiduciary duty if they failed to dedicate any time to educating themselves.
- Lack of regulation is a key factor bringing forth security concerns, though expected future regulation will serve as a boon to adoption of the asset class.
- As spot cryptocurrency exchange-traded funds (ETFs) continue to be hampered in the U.S. by the SEC, a variety of platform options have come to market that allow financial advisors to access cryptocurrency directly on behalf of their clients.
- Digital asset-related venture capital funding has had a blockbuster year, reaching more than five times the total funding of 2020, through the first three quarters of 2021.

Introduction to Cryptocurrency

At the outset, any new trend is too easy to ignore, offering dubious benefits relative to the comfortable tried and true. Only in hindsight is it clear something was destined to take hold. Themes can be as broad as the impact of the internet or as niche as the success of Allbirds woven sneakers and oat milk. All seemed moot and unnecessary at first but gained adoption as their benefits became appreciated and impossible to replace. For investors, this frontier where the ridiculous meets the future is an important battleground, as it can result in painful and unnecessary losses but also in tremendous returns.

Today, no individual asset class is more reflective of this frontier than cryptocurrency, which offers investors (as well as developers and speculators, amongst others) the ability to place bets—some most certainly poor—on an exceptionally uncertain future. As the asset class reaches more than $2 trillion in market capitalization, it becomes increasingly important for investing market participants, including asset managers and advisors, to engage and take a view. Some managers are well ahead, with Fidelity offering cryptocurrency custody as well as registering products under the Wise Origin brand. A leap into developing and/or investing in cryptocurrency is not for everyone, but Cerulli argues that managers and advisors at the very least need to be knowledgeable and be able to take a defensible view, even if it's one that acknowledges how much they don't know.

10-Largest Cryptocurrencies by Free Float Market Cap, December 2021

Rank	Name	Symbol	Market Cap ($ billions)
1	Bitcoin	BTC	$675.4
2	Ethereum	ETH	$407.5
3	Tether	USDT	$77.1
4	Solana	SOL	$56.3
5	Cardano	ADA	$41.6
6	USD Coin	USDC	$36.8
7	Binance Coin	BNB	$34.9
8	Ripple	XRP	$32.4
9	Terra	LUNA	$31.2
10	Polkadot	DOT	$30.2
All other cryptocurrencies			*$58.0*
Total			**$1,481.4**

Source: Coin Metrics | Analyst Note: Data gathered as of December 29th, 2021. See Appendix 1 for definition of Free Float Market Cap.

Definitions

Understanding even the basics of cryptocurrency is an intense intellectual challenge that encourages reflection on the meaning of money and what it means to be a store of value. As laid out in Cryptoassets, a 2017 book seeking to define the universe, the broad cryptocurrency universe can be divided into cryptocurrencies such as Bitcoin that can be used to pay for items, and cryptocommodities such as Ethereum and Solana. A more modernized definition classifies cryptocommodities as smart contract platforms, on top of which decentralized applications (Dapps) can be built. Smart contract platforms also have their own native cryptocurrencies (e.g., ETH for Ethereum and SOL for Solana), which can be used within those Dapps, and also feature the ability to create new tokens on top of the smart contract platform's underlying blockchain.

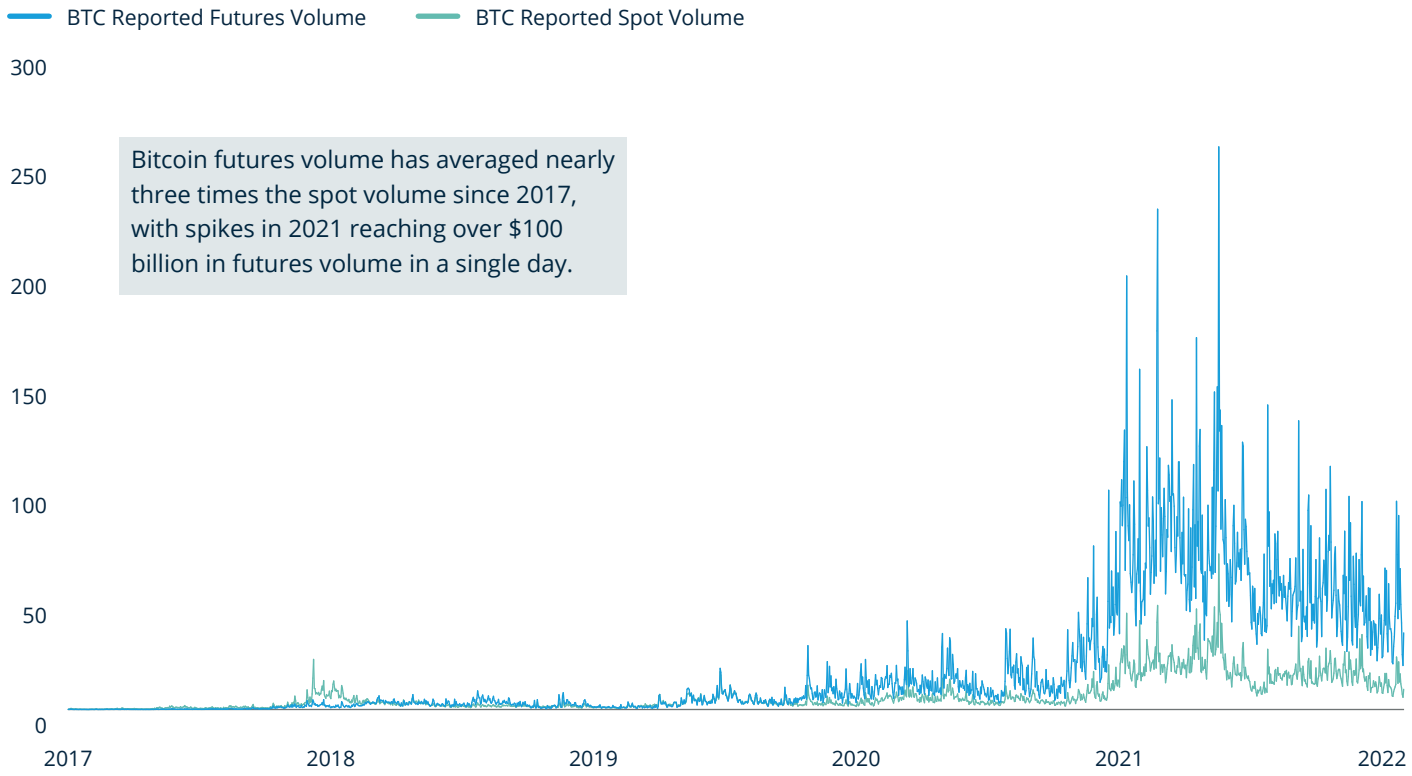
Each blockchain serves as a decentralized distributed ledger—a potential game changer even outside the world of cryptocurrency. Blockchain data is inherently open and transparent. Every transaction is publicly recorded on the public ledger, and the entire transaction history is immutably stored on the blockchain itself. Anyone can verify this transaction data by running their own "node," which is a piece of open-source software that runs a blockchain's core protocol.

Blockchain users each have a public address or set of addresses (sometimes called a wallet) that hold a specific cryptocurrency such as BTC or ETH. After a transaction is sent and recorded on the blockchain, address balances are effectively updated to reflect any amount of cryptocurrency transferred. This public transaction and address data can be used to calculate a rich set of metrics reflecting cryptocurrency supply, economics, and usage.
Key metrics such as free float market cap, realized cap, and trusted trading volume allow investors to understand the cryptocurrency landscape. As the cryptocurrency futures markets proliferate, eyes are also on open interest in futures and the comparison of futures versus spot trading.

Cryptocurrency markets progressed deeply into a futures-driven trading market as opposed to a spot-trading market. Having reached levels over 80% in 2021, futures volume accounts for approximately 75% of total BTC trading volume.

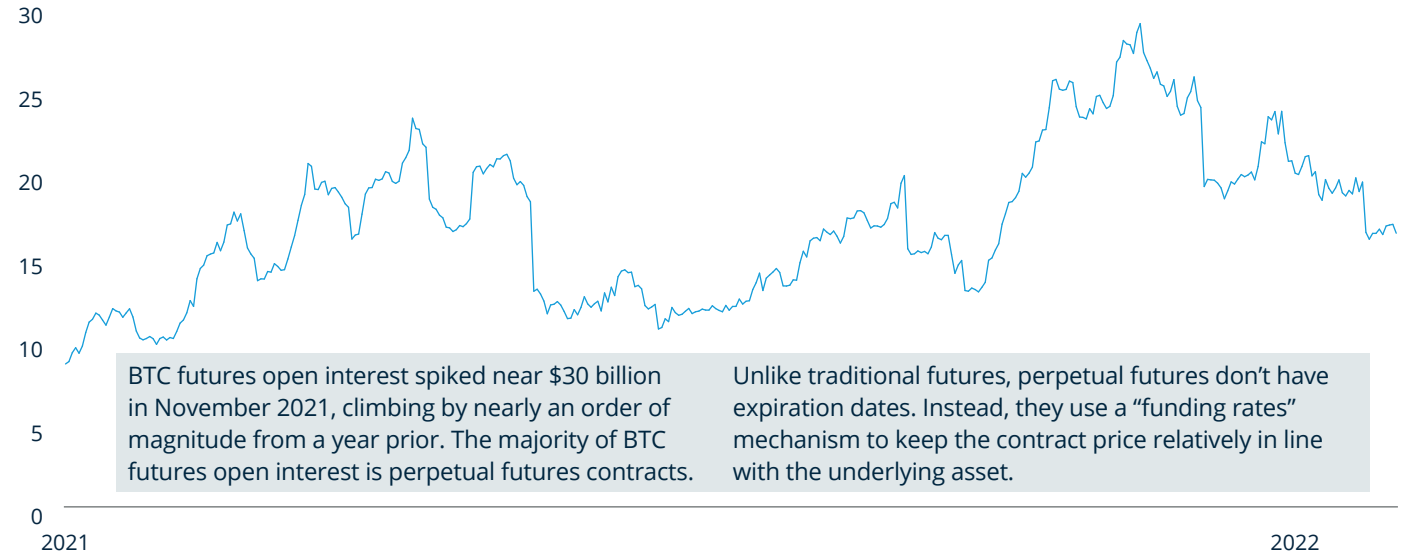
Historically, some cryptocurrency exchanges have offered high amounts of leverage on futures contracts (up to 100x or more), which has contributed to the high levels of futures trading volume. However, that has begun to change, as large exchanges Binance and FTX both reduced their leverage limit to 20x in 2021. Additionally, Chicago Mercantile Exchange (CME) futures, which are regulated in the U.S., have started to gain more ground over the last year as institutional investors have entered the market.

BTC Spot vs. Futures Trading Volume, January 2017- January 2022 ($ billions)



Source: Coin Metrics

BTC Futures Open Interest, January 2021 – January 2022 ($ billions)



Source: Coin Metrics

Advisors and Cryptocurrency

For advisors, cryptocurrency is increasingly too impactful to ignore as their clients—and not only younger ones—are likely to be interested in the offerings if not already accessing them via the likes of Coinbase and Robinhood. As cryptocurrency continues to gather traction, advisors will need to be able to tell their clients why they are or are not invested, and it will help to have a good answer. Given cryptocurrency volatility, whether clients invest in it outside the advisory relationship will also be an important talking point.

Advisor-Reported Alternative Investment Allocations, 2021 vs. 2023E

	Distribution in 2021	Expected Distribution in 2023
Non-alternative investments	89.5%	88.2%
All alternative investments	10.5%	11.8%

Sources: Cerulli Associates, in partnership with Blue Vault Partners

Advisors indicate that they allocate 10.5% to alternatives and plan to increase this exposure to 11.8% in two years. Cerulli notes that this allocation is slightly but not absurdly higher than the allocation provided by Cerulli's proprietary advisor survey, where advisors are asked to report their alternative and commodity allocations relative to other asset classes (as opposed to this survey when it was requested as a standalone portion). The comparable data from Cerulli showed a 7.3% current reported allocation to alternatives, rising to 7.7% in 2023. Differences are attributed to self-reporting biases and question framing, where the Cerulli survey has advisors allocate to a more detailed group of asset classes, as opposed to only alternative and non-alternative.

Why advisors avoid cryptocurrency

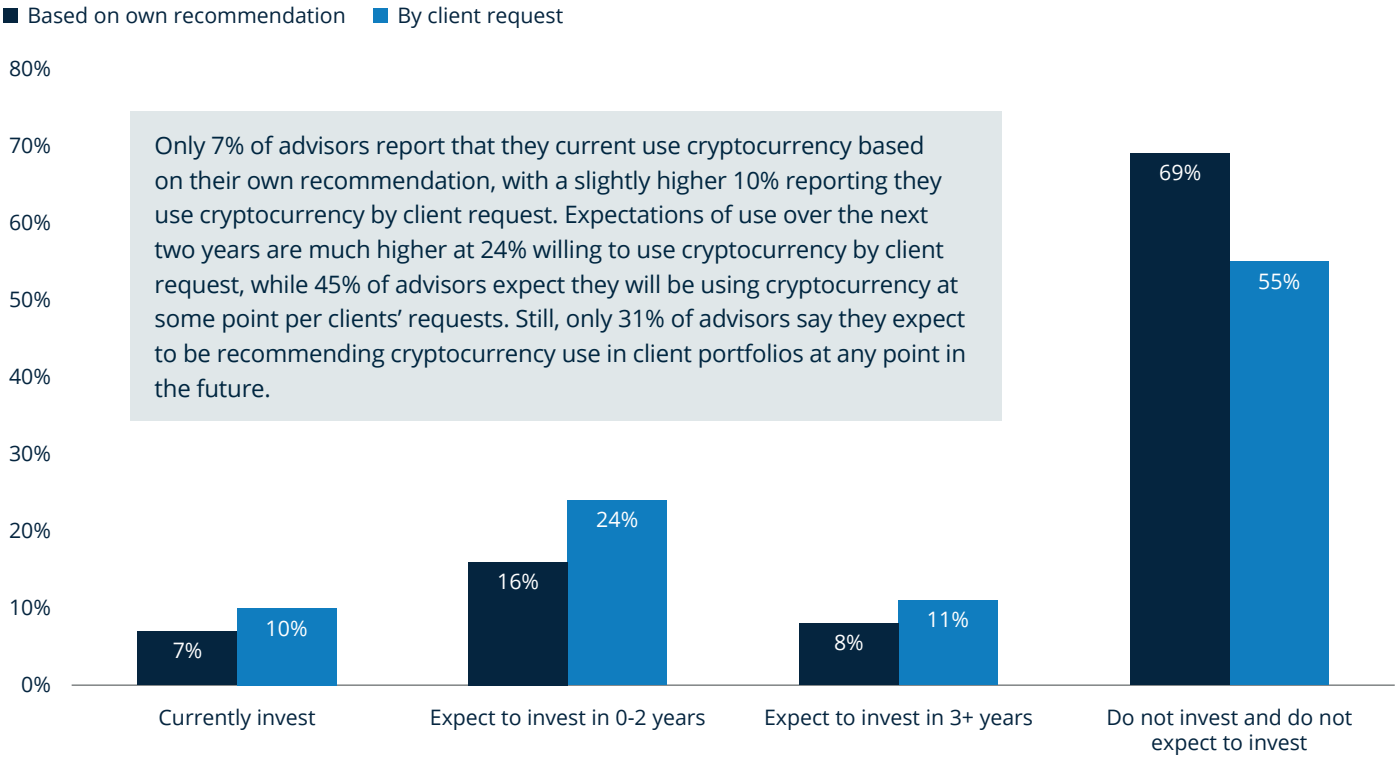
For managers, Cerulli believes that cryptocurrency offers an important asset-gathering opportunity. To understand a path to widespread adoption, questions must be asked regarding why financial advisors are staying away from cryptocurrency. Many simply don't understand or believe in the cryptocurrency as an investment. Advisors commonly believe that the definition of an investment involves the expectation of real return. SEC Chair Gary Gensler was quoted saying, "Buyers of cryptocurrency tokens are like investors who provide seed venture capital funding, both are anticipating profits from a sponsor." However, given the fact that crypto assets do not represent claims on a stream of income, advisors often believe that there is a lack of ability to be valued or expectation of growth. Many believe buying cryptocurrency is more akin to gambling, and that the value is driven by supply and demand factors from market participants that cannot be relied upon in any predictable manner. The lack of trust in market participants makes advisors believe cryptocurrency is only a fad.

Outside of belief-based reasons that advisors avoid cryptocurrency, structural factors make it difficult or impossible for advisors to commit to incorporation of cryptocurrency in their strategy. Many firms don't offer investment options for cryptocurrency through their platforms, forcing advisors who want access to direct their clients to use outside platforms. This inhibits advisors from exercising discretion on cryptocurrency assets and places a burden on the client for a portion of their planning. Even for advisors who are permitted by their firms to build in cryptocurrency to their planning and strategies, advisors are faced with mixed messaging and poor information from a tax and regulatory compliance standpoint. The complexities and dissimilarities associated with cryptocurrency as opposed to traditional asset classes create a time commitment for advisors. For what currently exists as a tiny sliver of some portfolios, advisors may see an imbalance in their return on time spent.

Why advisors should understand cryptocurrency

Regardless of beliefs, cryptocurrency represents opportunities for financial advisors to gather assets. According to the Financial Planning Association, 80% of financial advisors report they are being asked about cryptocurrencies, while only 14% are using or recommending cryptocurrencies. The wariness of advisors to enter the space should be relieved over time as regulation and security improve. Security concerns often stem from headlines regarding cryptocurrency wallet hacks and data breaches at exchanges. Top-tier exchanges will surely prioritize security to protect their clients' personal information. Meanwhile, investor protection from hacking is similar to any other credential protection, where use of strong passwords and two-factor authentication are crucial steps in prevention of theft. Somewhat unique to the world of cryptocurrency is the danger of transferring cryptocurrency to the wrong place by using an incorrect wallet key. Particular attention must be paid to accuracy, as coins transferred to the wrong place are not easily recovered, and in many cases lost. Overall, security concerns appear to be the crux of the issue the SEC is posing

Advisor-Reported Use and Expected Use of Cryptocurrencies, 2021



Source: Cerulli Associates, in partnership with Blue Vault Partners

Advisors' Actual and Expected Distribution of Alternative Assets, 2021 vs. 2023E

Alternative Asset Class	Distribution in 2021	Expected Distribution in 2023	Percentage-Point Change
Private equity	20.9%	20.5%	-0.4%
Other private investments	20.6%	22.5%	1.9%
Debt	5.4%	4.2%	-1.2%
Natural resources	2.8%	3.4%	0.6%
Infrastructure	2.4%	4.9%	2.5%
Real estate	10.0%	10.0%	0.0%
Non-traded REITs	18.6%	13.6%	-5.0%
Hedge funds	9.0%	10.3%	1.3%
Venture capital	8.4%	9.7%	1.3%
Non-traded BDCs	8.2%	6.0%	-2.2%
Interval funds	5.5%	5.7%	0.2%
Cryptocurrency	2.3%	2.5%	0.2%
Other	6.7%	9.3%	2.6%

Source: Cerulli Associates | Analyst Note: Excludes liquid alternatives.

regarding approval of cryptocurrency spot-based ETFs. Advisors owe it to their clients to understand the world of cryptocurrency, so at the very least they have reasoning to support their viewpoint for not including it in their portfolios. Some view this as part of advisors' fiduciary duty—a simple lack of understanding of cryptocurrency is not doing the client justice in assessing investment opportunities available. While heavily debated, certain research shows cryptocurrency has proven to be a non-correlated asset class that can help with portfolio diversification and may also serve as a hedge to inflation. Cerulli believes a lack of understanding and offering access can be a source of asset leakage for advisors, as clients who see others profiting from cryptocurrency may look for a new advisor—or a direct investing opportunity via Coinbase or Robinhood, which makes the option available to them.

Advisors may be keen to gain exposure to the cryptocurrency and blockchain realm through means other than direct investment in cryptocurrencies. Investments in exchanges such as Coinbase, or other fintech providers such as PayPal and Square, may do well to scratch the itch of their clients who want to ensure they are not completely separated from opportunities adjacent to crypto assets. Other equity opportunities may be much more correlated and reliant on the price of various coins, such as Silvergate Capital Corp., MicroStrategy Inc., and Hut-8 Mining Corp., all of which operate core businesses that are reliant on the success of cryptocurrency and blockchain. Exposure to businesses such as these can be accomplished by a variety of ETFs, such as the Amplify Transformational Data Sharing ETF (BLOK). For those looking to cover the basis of understanding of the cryptocurrency landscape, care should be taken regarding the resources used. The Digital Assets Council of Financial Professions offers a certificate in blockchain and digital assets, which counts as 13 Continued Education (CE) or Professional Learning (PL) credits for Certified Financial Planners and Chartered Financial Analysts.

Cryptocurrency Product Development Trends

Product development for cryptocurrency is occurring rapidly, for both investment products and platforms used to access cryptocurrency. While products are coming to market, adoption of products may be far slower given the myriad choices and investor or advisor hesitancy, among other reasons. Cryptocurrency-focused organizations realize the significant complexity that has come as a by-product of rapid growth, and some are working to develop standards that aid in understanding for investors. For example, CoinDesk Indices is working to introduce a classification standard similar to how the Global Industry Classification Standard (GICS) works for equities. The Digital Asset Classification Standard (DACS) will help classify the industries that fall within the asset class, via a three-tiered system of six sectors, 21 industry groups, and 36 industries. Like GICS, the DACS system is designed to be mutually exclusive and collectively exhaustive, so that each digital asset will only fall under one node in each tier.

ETFs

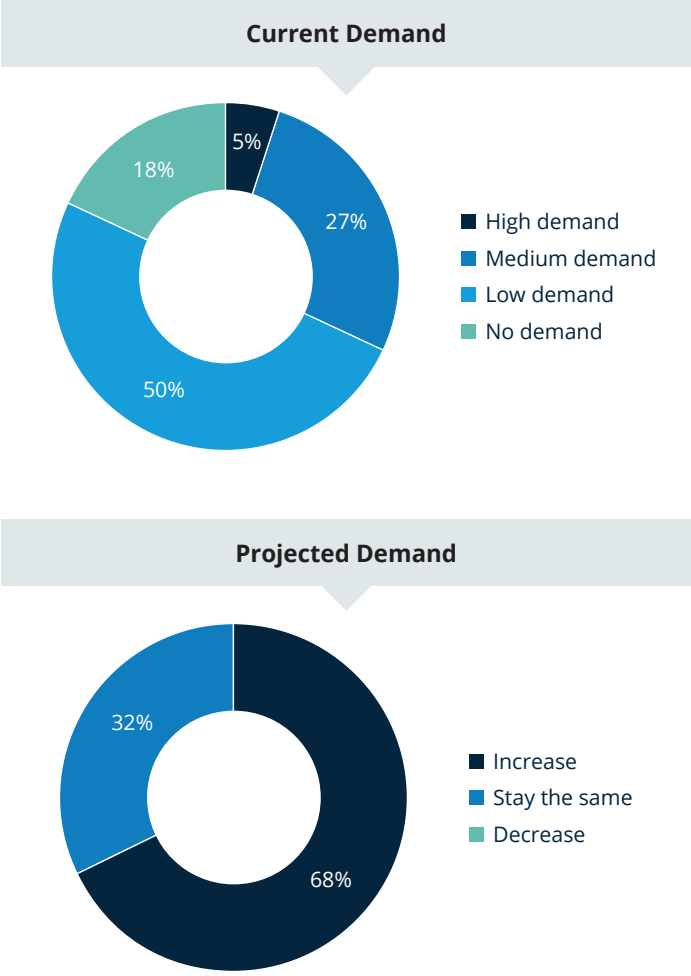
Plastering recent headlines, the development of cryptocurrency exchange-traded funds (ETFs) has finally reached another one of its checkpoints, as the SEC approved the first slew of futures-based Bitcoin ETFs, including the ProShares Bitcoin Strategy ETF (BITO) and the Valkyrie Bitcoin Strategy ETF (BTF). For U.S. investors, this provides an alternative to the U.S. incumbent Grayscale Bitcoin Trust (GBTC), which, unlike the futures-based Bitcoin ETFs, is actually based on the spot price of Bitcoin, given it is a trust company that stores Bitcoin offline. Investors holding GBTC face volatility that is often disconnected from the volatility of the underlying holdings, as seen in the discount or premium of the share price to the net asset value (NAV). At one point back near the time the trust was launched, the shares traded at more than a 130% premium to the NAV. That has come down heavily and the shares have traded at a discount to NAV since March 2021.

Futures-based ETFs face tracking error issues similar to any futures-based products, where investors may not be gaining the exposure they are intending. Futures-based products are complicated and rolling over the contracts comes at a cost to investors that hold over long periods. Some industry experts believe this makes the futures-based ETF an inferior product to owning cryptocurrency directly or a spot-based Bitcoin ETF, which have yet to be released in the U.S. Applications for approval of spot-based crypto ETFs are plentiful in the U.S., though SEC approval doesn't appear to be on the near-term horizon. The presence of several spot-based Bitcoin ETFs in Canada, including a recent launch by Fidelity Investments, leaves many optimistic that the time to shine in the U.S. is near. Expectations of approval are often heard saying "next year is the year," while others believe we may never see a spot Bitcoin ETF approved in the U.S. because the SEC may view the product as a currency. Those sharing this opinion point out that nearly all commodities-like investments are futures-based, so approval of a spot-based product may be out of consideration. One overwhelming opinion is that exchange regulation will need to come before a spot-based product is approved.

Asset managers

As traditional legacy asset managers begin to inch into the cryptocurrency and blockchain world through new digital-asset focused divisions, firms exclusively dedicated to the crypto space have shown signs of success as early movers. Galaxy Digital, a crypto financial services company for professional investors domiciled in the Cayman Islands,

Asset Managers: Perceived Demand for Cryptocurrency Exposures, 2021



While most asset managers currently see low to medium demand for cryptocurrency exposures, more than two-thirds expect this to increase

Source: Cerulli Associates

offers asset management, trading, investment banking, and mining of new tokens, among other capabilities. The company saw its trading net income rise 3600% in 3Q 2021 year-over-year, a positive sign leading into its $500 million convertible debt offering. The company is seeking to restructure and list its shares in the U.S. in 2022. The venture capital (VC) world has seen an explosion of activity around cryptocurrency and blockchain in 2021, with $15 billion in venture capital funding through the first 3 quarters of 2021, a 500% increase from 2020. In the third quarter alone, 15 rounds of at least $100 million in funding for blockchain occurred. Moving into the fourth quarter, the largest crypto venture fund ($2.5 billion) launched as the month saw an additional $3 billion in venture capital funding. Coinbase Ventures has been a headline name in the space, completing 24 deals in 3Q 2021, meanwhile traditional VC groups such as Sequoia Capital and Table Management are entering the space.

Seemingly at the top of the charts for crypto and blockchain VC stands Digital Currency Group, whose portfolio companies include some of the top recognized names in crypto and blockchain, including Coinbase, FTX, Grayscale, and Ripple. A late 2021 funding round led by SoftBank drew a valuation in excess of $10 billion for the private company, which the CEO said expects to top $1 billion in revenue for the year.

Outside of the VC space, other cryptocurrency-adjacent funds are finding opportunities to attract assets and generate returns. According to EY's 2021 Global Alternative Fund Survey, 10% of hedge fund managers report exposure to crypto markets. While many may be simply holding various crypto assets or trading futures in expectation of capital appreciation and arbitrage, other funds are looking to the decentralized finance ecosystem to generate excess return. Maha DeFi, an investment fund by Maha Advisors, seeks to harvest revenue from DeFi protocols by supplying capital to the protocols. The fund is chain- and protocol-agnostic, and offers two share classes, one of which hedges out directional risk for any specific protocol. This is just one example of how returns can be generated from various sectors of the digital asset space.

Platforms

For the population of advisors who prefer to access cryptocurrency direct on behalf of their clients, or do not want to wait for a spot Bitcoin ETF, platforms are emerging as tools that solve pain points involved with sending clients to buy cryptocurrency on their own.

Onramp Invest and Flourish are two platforms for advisors that serve as a means to access, trade, and learn about cryptocurrency on behalf of their clients. A key benefit that both platforms seek to provide is a seamless integration of tools that give advisors full transparency for their clients' crypto assets, allowing advisors to effectively handle financial planning with the inclusion of both held-away assets and assets held through qualified custodians directly through the platform. These platforms have a variety of backers, integrations with fintech providers, and capabilities that distinguish them from each other, and focus on expanding the offering is evident for both.

BITRIA, recently rebranded from Blockchange, Inc., offers a digital asset investing platform for financial advisors, and includes a network of separately managed account (SMA) partners that offer differentiated model strategies. The platform is built on top of Gemini's custody and infrastructure offerings and is now integrated with any portfolio accounting platforms that integrate with Morningstar ByAllAccounts. Capabilities of the platform are expanding to make its use as easy as possible, including access to ACATS for money movement into and out of accounts.

Rocket Dollar Inc., founded in 2018, offers self-directed IRAs and self-directed solo 401(k)s through which investors can purchase nontraditional assets including cryptocurrencies and blockchain startups, among other assets. Gemini, Coinbase, ErisX, and River Financial are among the exchanges that Rocket Dollar has specific instructions for registration, but they note that any cryptocurrency exchange that can allow sign-up of the self-directed IRA LLC or solo 401(k) trust can be used with Rocket Dollar.

Swan Bitcoin, which offers automatic deductions and investments into bitcoin, will soon see a service offered to financial advisors, adding it to the list of platforms offerings that advisors can use with their clients.

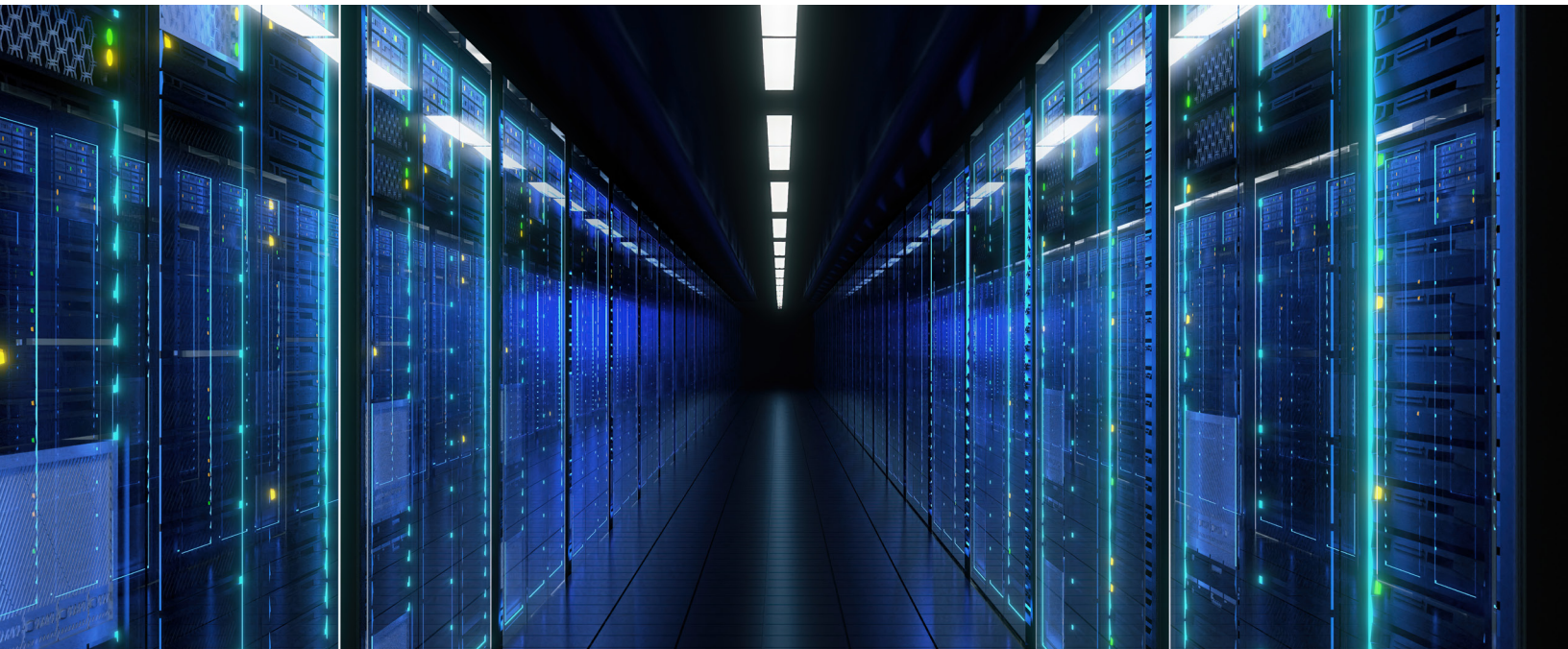
All of these platforms solve issues associated with traditional custody and access tools, which in their current state do not work well with digital assets. The nature of digital assets, whose markets do not close, creates a need for innovation to which large legacy infrastructure players may not be able to quickly adapt. From basic needs such as transparency to complex tools such as automated rebalancing, cryptocurrency-focused fintech is rapidly evolving, and trusted names are already grabbing first-mover advantages.

The Time for Action Has Arrived

As rapid development continues to occur in all corners of the cryptocurrency and blockchain world, Cerulli believes financial advisors and asset managers should no longer avoid gaining knowledge and a stance on cryptocurrency. Financial advisors have a duty to their clients to assess all investment options available to them, and the options in cryptocurrency are becoming more plentiful and easily accessible than ever. Meanwhile, Cerulli believes the opportunity for asset managers in the U.S. exists, and is in its early stages.

While futures-based ETFs and nontraditional offerings currently exist, opportunities lie in active product development. Whether in cryptocurrencies themselves, or in blockchain-focused companies, exposures that have been limited to private equity and venture capital will become increasingly available in the public equity markets. Financial advisors should allow clients to make small allocations to cryptocurrency, with an understanding of the risk profile associated with the asset class, and a defined portfolio fit. Using platform capabilities to access and exercise discretion over crypto assets will be crucial to providing the client experience desired. Home offices will do well to allow selective access to certain cryptocurrencies and platforms for their advisors, in order to reduce the risk of losing assets by restricting their capabilities.

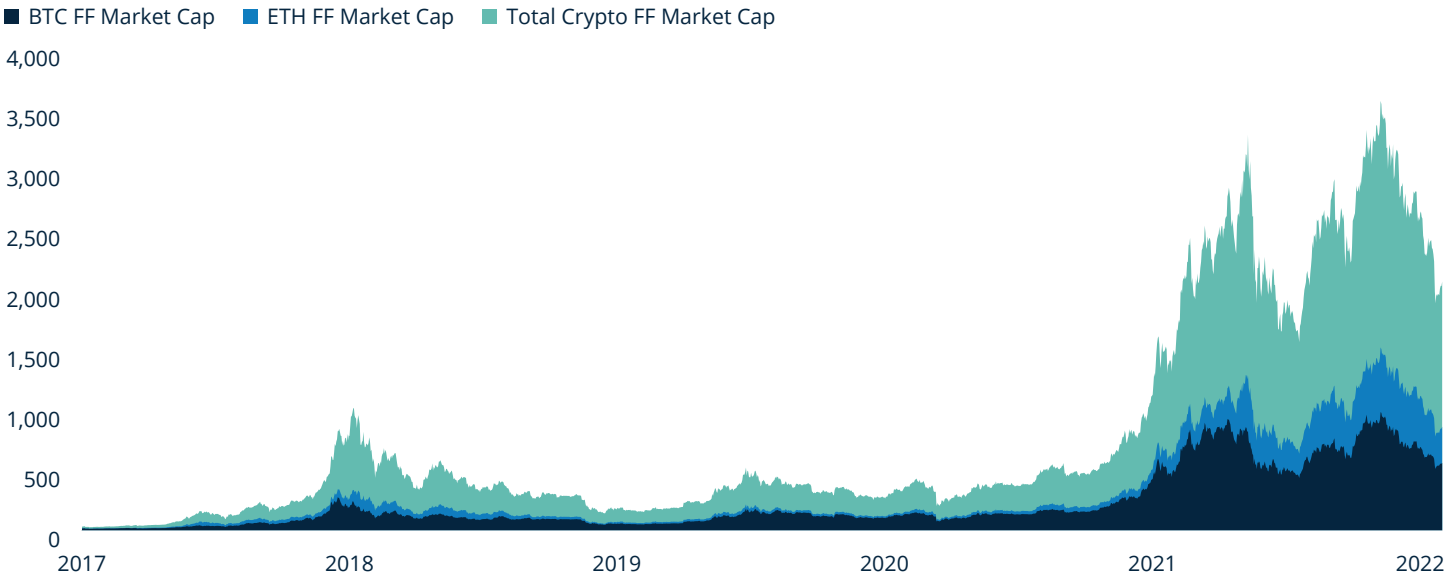
As the cryptocurrency asset class continues to grab headlines with product development efforts, use of trusted resources from thought leaders and due diligence providers will allow financial professionals the means of awareness and knowledge, an important need in these early days.



Appendix

Free float market capitalization is calculated by multiplying free float supply by current market price. The free float supply measures the total supply of cryptocurrencies while excluding illiquid supply such as crypto assets that are locked up by foundations or companies, while also excluding supply that is proven to be lost or inactive for at least five years. Locked-up crypto assets can include assets owned by executive teams and strategic investment partners that do not provide liquidity to markets. Current total free float market cap is approximately $1.3 trillion, of which $700 billion is BTC.

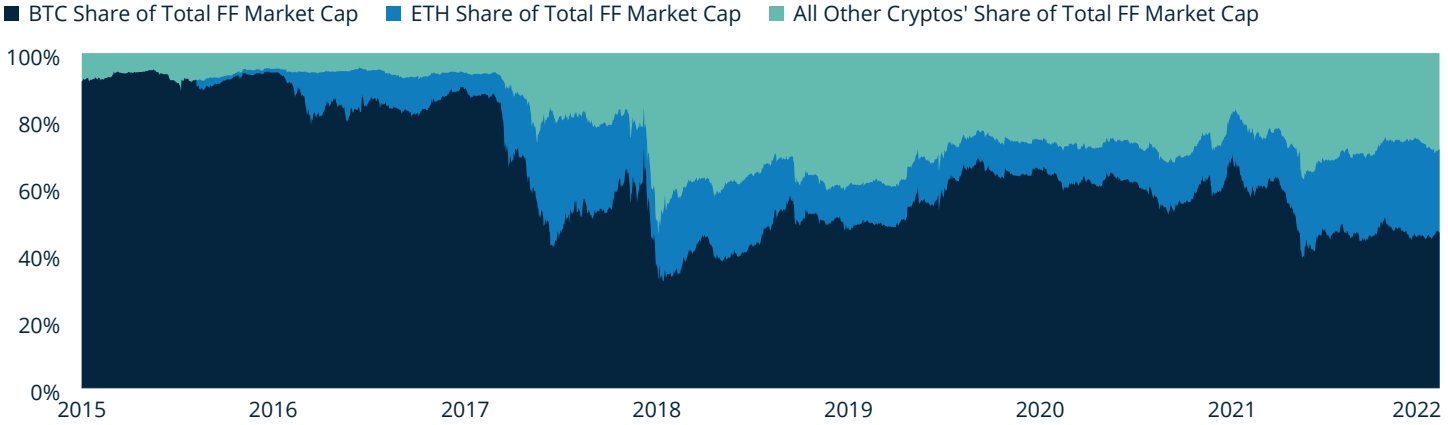
BTC and Total Crypto Free Float Market Cap, January 2017 - January 2022 ($ billions)



Source: Coin Metrics | Analyst Note: The total crypto free float market cap includes approximately 100 of the largest cryptoassets, which collectively cover at least 99% of all crypto market cap.

BTC makes up nearly half of all crypto total market cap, with second-largest ETH comprising greater than one-quarter. All other cryptocurrencies make up the last quarter of market cap. Until 2016, BTC held approximately 90% of total crypto market cap, at which time ETH grabbed more than 10% of marketshare in a quick movement. Over 2017 and into 2018, ETH continued to grab share while other cryptocurrencies saw proliferation to reach levels near 50% of free float market cap, a level that has declined by nearly half as ETH grabbed share while BTC held relatively consistent.

BTC & ETH Percent Share of Total Free Float Market Cap, January 2015 - January 2022 ($ billions)

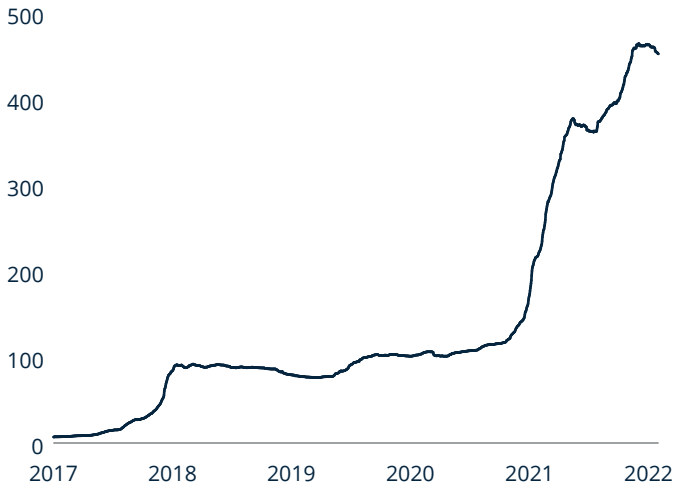


Source: Coin Metrics

Appendix

Thanks to the manner of the distributed ledger, it is possible to see an approximation of aggregate cost basis of the supply of cryptocurrencies by calculating the aggregate sum of the price of cryptocurrencies the last time each individual coin was transferred on the chain. From this approximation, an estimate of capital inflows and outflows can be done, where large increases in realized cap may indicate inflows and large decreases in realized cap may indicate outflows.

BTC Realized Cap, January 2017 - January 2022 ($ billions)



Source: Coin Metrics

10-Largest Cryptocurrency Exchanges by One-Month Spot Volume, January 2022

Rank	Name	One-Month Spot Volume ($ billions)	Dollar Volume Marketshare
1	Binance	$503	41%
2	OKEx	$194	16%
3	Coinbase	$125	10%
4	Upbit	$95	8%
5	KuCoin	$78	6%
6	FTX	$68	6%
7	Huobi	$64	5%
8	Gate.io	$38	3%
9	Kraken	$34	3%
10	Bitfinex	$31	3%
Top-10 Total		**$1,230**	**100%**

Source: Coin Metrics | Analyst Note: Data represents January 2022

10-Largest Cryptocurrency Fund Managers, January 2022 ($ millions)

Rank	Name	Assets	Predominant Structure	Notable Products
1	Grayscale Investments	$42,424	Listed Trust	GBTC, ETHE, ETCG, GDLC
2	3iQ Corp.	$2,192	ETFs (Canada)	BTCQ, ETHQ, QTBC.U, QETH.U
3	Pantera Capital	$1,792	Hedge Fund	Pantera Bitcoin Fund
4	Panxora Management Corporation	$735	Hedge Fund	Panxora Crypto I Hedge Fund
5	SkyBridge Capital	$310	Hedge Fund	First Trust SkyBridge Bitcoin Fund
6	Bitfinex	$280	Hedge Fund	Fulger Alpha
7	Spartan Capital (HK)	$260	Hedge Fund	Spartan Global Blockchain Opportunities Fund
8	Alphemy Capital	$238	Hedge Fund	Alphemy Master Fund I
9	Arca	$213	Hedge Fund	Arca Digital Assets Master Fund
10	Cambrian Asset Management	$206	Hedge Fund	Cambrian Systematic Strategies
All Other managers		**$2,317**		

Source: Prequin | Analyst Note: Data gathered January 10, 2022

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