

CF CRYPTO FUND RESEARCH

2021 Q3

Crypto Fund Quarterly Report



GLOBAL SHARE of Crypto Fund Assets

Global share of crypto fund assets by region

- North America: 2.7%
- Asia: 10.8%
- Europe: 7.0%
- South America: 0.4%



Growth

Global share of crypto fund assets by region

- North America: 2.7%
- Asia: 10.8%
- Europe: 7.0%
- South America: 0.4%

Table of Contents

Introduction	3
<hr/>	
Chapter 1: Crypto Fund Industry Overview	4
<hr/>	
Chapter 2: Crypto Fund Performance Data and Metrics	12
<hr/>	
Chapter 3: Crypto Fund Survey Results	18
<hr/>	
About the Report	27

Introduction

Purpose

Crypto Fund Quarterly Report Q3 2021

Crypto Fund Research's quarterly crypto fund reports provide a snapshot of the industry at quarter's end, as well as a detailed look at industry trends across time. We hope the quantitative data and related insights provided by these reports play a positive role in continuing to improve the crypto fund industry's transparency and provide useful metrics for crypto funds and other participants to benchmark their growth, operations, and best-practices.

In the interest of providing the broadest possible coverage, the report covers crypto hedge funds, venture funds, hybrid funds, private equity funds, fund of funds, and passive funds. Where not otherwise noted, the term "crypto fund" is used in a manner inclusive of this wide variety of fund types.

Market Overview

As of the end of Q3, 2021 there were more than 850 crypto funds across the globe with primary offices in more than 80 countries. The pace of new fund launches began to accelerate in the first quarter of 2021, and this trend continued during Q2 and Q3 as new fund launches outpaced fund closures for the fourth straight quarter.

Crypto funds returned 23.6% in Q3 - falling just short of Bitcoin's 25.0% return for the quarter. Through the first 3 quarters of 2021, crypto funds and Bitcoin returned 115.6% and 51.0% respectively.

In the News

The Bad

- The founder of Virgil Capital, formerly a cryptocurrency hedge fund based in NY, was sentenced to 90 months in prison for embezzling investor funds

The Good

- JP Morgan announced it would begin giving its wealth management clients access to crypto funds
- Germany announced it will allow institutional funds to hold up to 20% of their assets in cryptocurrency

Crypto Fund Industry Overview

Just over half of all crypto funds are based in North America - most in the US. Europe and Asia are each home to around 20% of funds.

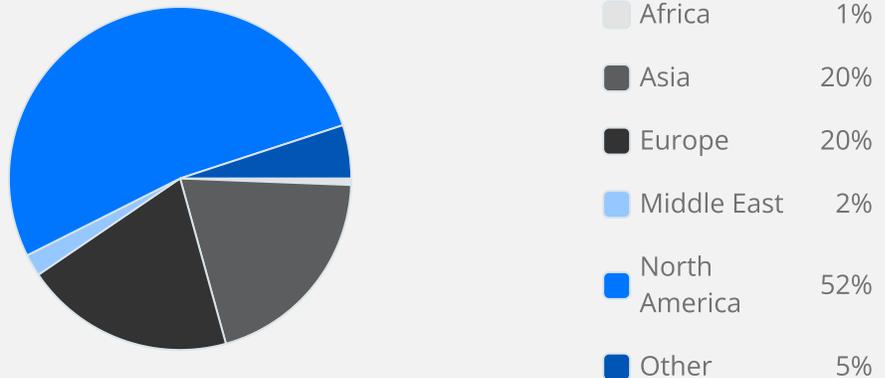
However, it's important to note that crypto funds tend to be more likely to have "distributed" workforces than traditional funds.

A 2021 [survey of crypto funds](#) by Crypto Fund Research found that rather than maintaining one or more physical offices, 27% of funds do not rely on a physical office and instead have employees working from home or other locations around the world.

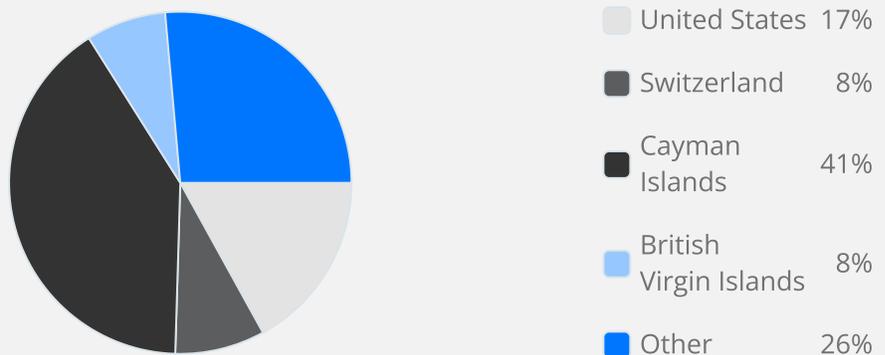
While the majority of crypto funds have a primary office location in the US, less than 20% are

technically domiciled there (as a Delaware company, for example). For a variety of tax, legal, and regulatory reasons, the Cayman Islands and the British Virgin Islands are the predominant offshore legal domiciles for crypto funds. Together these offshore locales are the domicile for 49% of crypto funds. This is relatively consistent with studies of traditional hedge funds that have found about one third are domiciled offshore with only 20% domiciled in the US.

Crypto Funds by Continent
Primary Office Q3 '21



Crypto Funds by Legal Domicile
Q3 '21



Crypto Fund Industry Overview

The majority of crypto funds can be broadly categorized as venture funds, followed closely by crypto hedge funds.

Crypto Funds by Type
Q3 '21



Crypto fund assets under management (AUM) climbed to \$59.6 billion in Q3, a gain of \$7.2 billion. This gain is the result of strong quarterly performance as well as net investor inflows.

Cumulative Crypto Funds' AUM
Q3 '18 - Q3 '21 (Millions USD)



Crypto Fund Industry Overview

Crypto fund flows are an important indicator of investor sentiment. They are the net of new investor subscriptions and redemptions and are independent of changes in the performance of funds' underlying assets.

Crypto Fund Net Flows

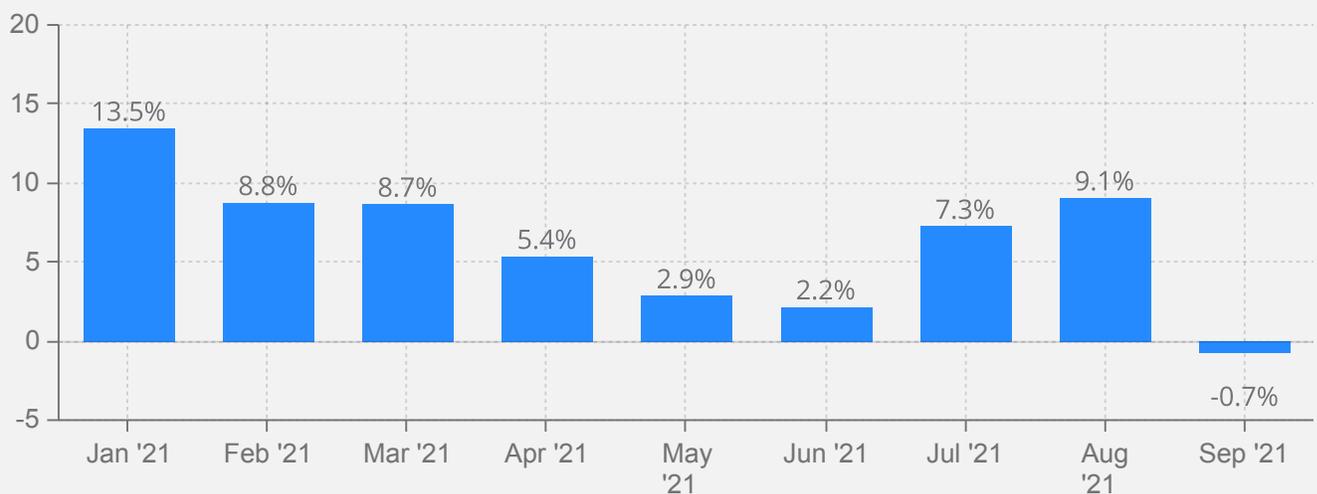
Monthly absolute net in/outflows for crypto hedge funds (\$millions USD)



Despite very modest net outflows in September, crypto hedge funds saw significant net inflows of \$1.6 billion in Q3.

Crypto Fund Net Percentage Flows

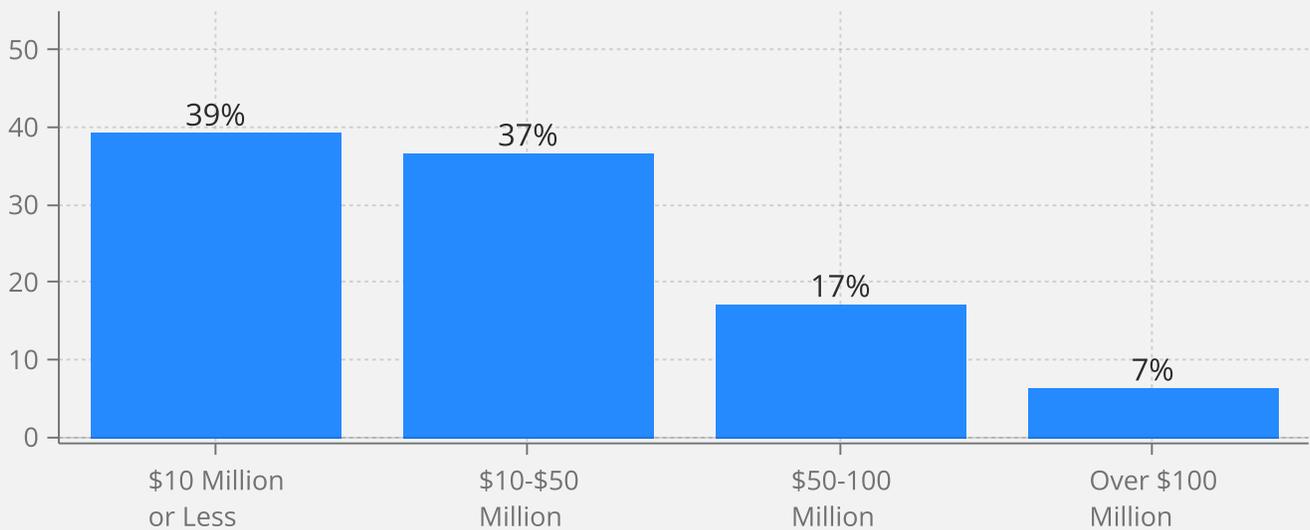
Monthly crypto fund net in/outflows as a percentage of assets reported in the prior period



Crypto Fund Industry Overview

Though crypto fund AUM has continued to grow, assets remain highly concentrated in the hands of a couple dozen funds. However the recent trend has been one of growing size of crypto funds. This is primarily due to strong performance as well as attrition by some smaller funds.

**Crypto Fund Asset Size
By Fund AUM Q3 2021**



\$59.60 Billion

Crypto Fund Research estimates that as of the end of Q3 2021, crypto funds collectively managed approximately \$59.6 billion in assets. This includes crypto hedge funds, venture funds, and index funds and represents the highest ever level of assets under management for crypto funds.

39.0%

While most crypto funds remain relatively small, the proportion managing \$10 million or less continues to shrink as funds continue to attract new funds and grow their AUM through positive fund performance. 39% of crypto funds manage \$10 million or less.

Crypto Fund Industry Overview

Due to the variation in size and vintage between crypto funds, it can be useful to look at median figures for some key operational metrics as shown below:



Median Fund AUM

Crypto fund assets are quite top-heavy and highly concentrated in the hands of a couple dozen funds. In fact, a quarter of all assets are managed by the 5 largest crypto funds. 39% of crypto funds manage USD 10 million or less in crypto assets.



Median Number of Employees

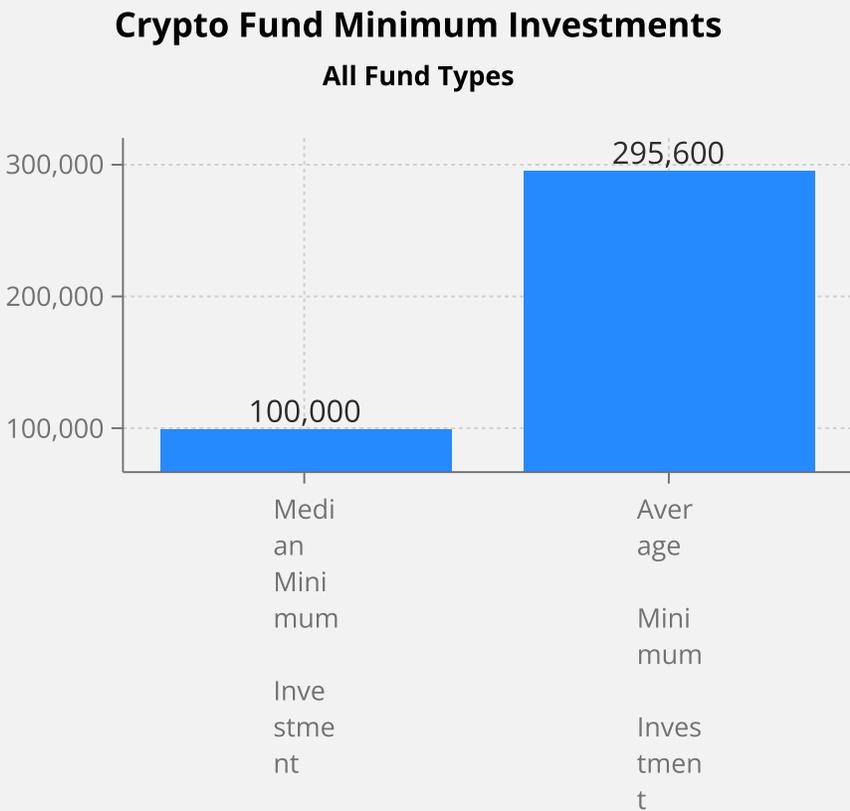
Though some crypto funds have a dozen or more employees, most funds are relatively small. The median number of full-time employees in non-advisory roles is seven.



Median Number of Investments

Among crypto/blockchain-only venture funds, the median number of investments made since inception is 19. Most of these investments are early-stage investments and older vintage funds tend to have made a greater number of total investments.

Crypto Fund Industry Overview



26%

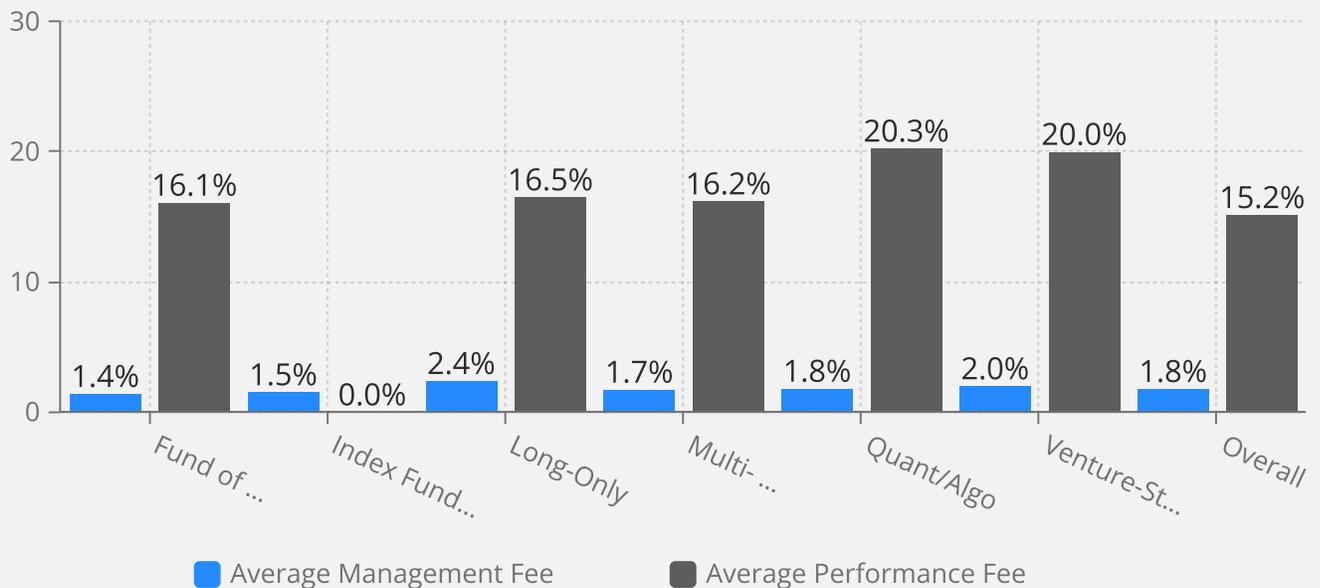
26% of crypto hedge funds have a minimum investment of \$500,000 USD or more

Minimum investments in crypto funds vary significantly across fund types. Crypto hedge funds and fund of funds typically have the highest minimum investment, while tokenized funds have low or non-existent minimums.

Type	Median Min. Investment	Average Min. Investment
Fund of Funds	\$100,000	\$175,000
Hedge Fund	\$100,000	\$310,700
Index Fund	\$50,000	\$243,200
Investment Trust	\$37,500	\$37,500
Managed Account Platform	\$6,250	\$6,250
Mutual Fund Trust	\$1,000	\$1,000
Tokenized Fund	\$0	\$5,000
TOTAL	\$100,000	\$295,600

Crypto Fund Industry Overview

Crypto Fund Average Fees
By Fund Category Q3 '21

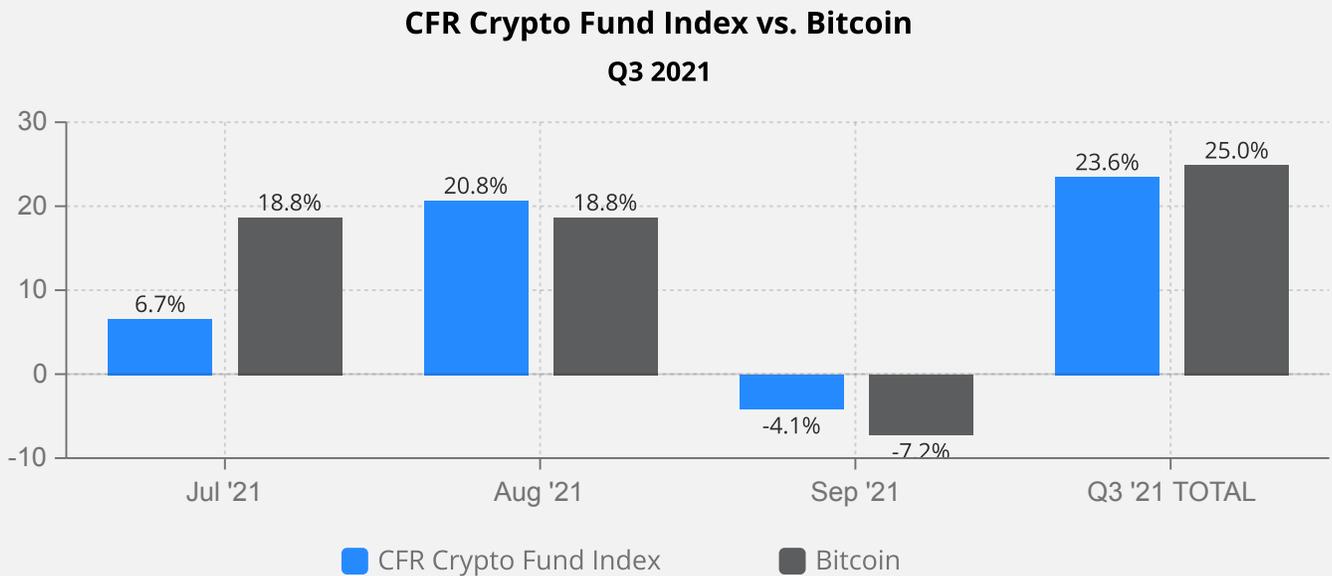


A 2% management fee and 20% incentive/performance fee (2/20) is the most common fee structure among crypto funds. However, the average fees across all funds tend to be lower and vary slightly between fund types. Index and other passive strategies often don't charge a performance fee, while funds with more active investment strategies tend to have higher performance fees (and sometimes lower management fees).

Fund Type	Average Perf. Fee	Average Mgmt. Fee
Fund of Funds	16.10%	1.41%
Index Fund / Tracker	0.00%	1.54%
Long-Only	16.54%	2.40%
Multi-Strategy/Other	16.20%	1.74%
Quantitative/Algorithmic	20.25%	1.81%
Venture-Style/ICOs	20.00%	2.00%
TOTAL	15.15%	1.79%

Crypto Fund Performance Data and Metrics

The CFR Crypto Fund Index, which measures the mean return, net of fees, of around 100 actively managed crypto funds, returned 23.6% in Q3 2021 and is up 116% through the first three quarters of 2021.



23.6%

The CFR Crypto Fund Index gained 23.6% in Q3, 2021. Crypto funds slightly underperformed Bitcoin, but remain significantly ahead of Bitcoin for the year.

87.6%

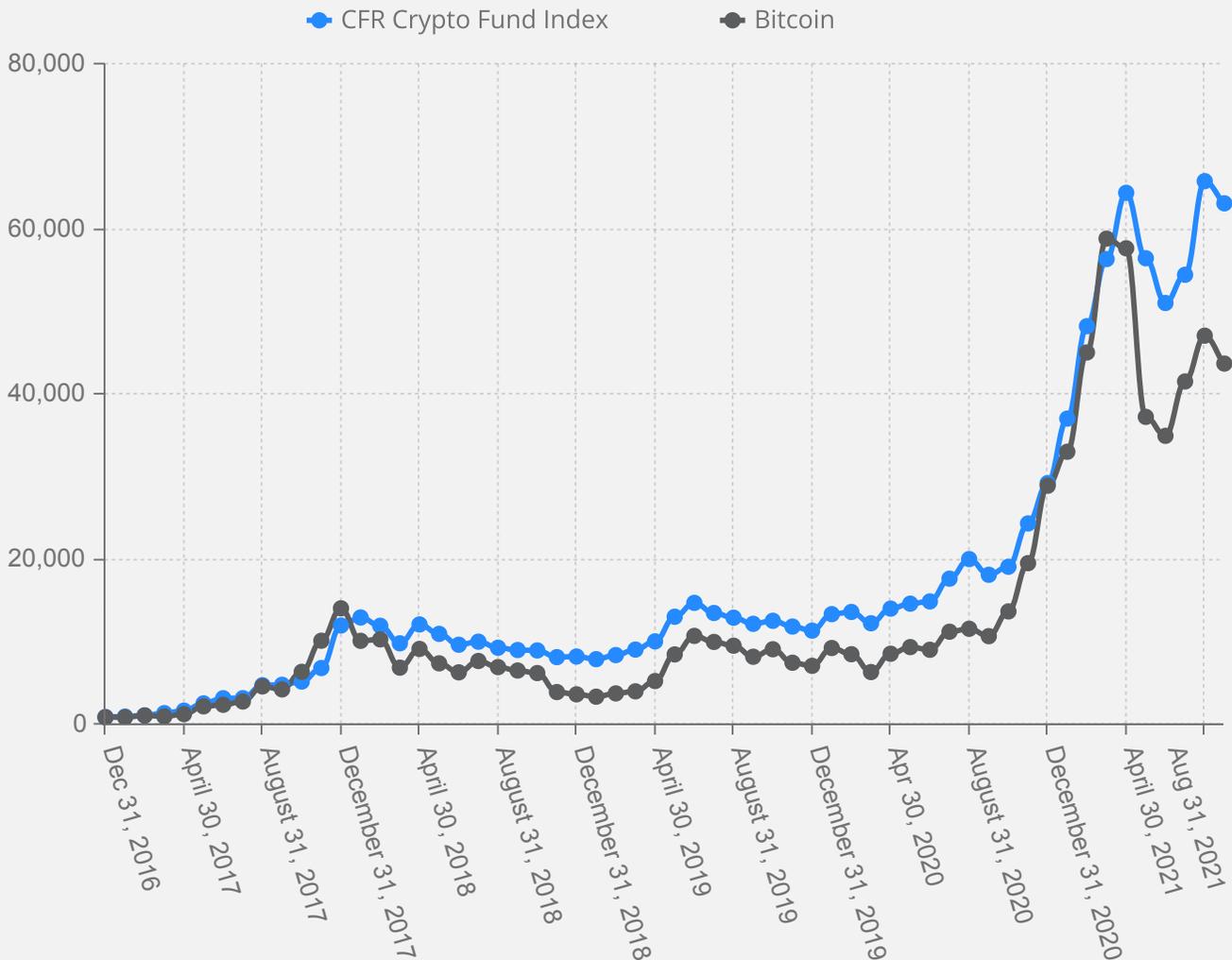
Crypto funds slightly underperformed Bitcoin in Q3 overall and more than two thirds of funds fell short of Bitcoin's returns for the quarter.

For the latest results from the CFR Crypto Fund Index please visit:
<https://cryptofundresearch.com/cfr-crypto-fund-index/>

Crypto Fund Performance Data and Metrics

Between inception in January of 2017 and the end of Q3 2021, the CFR Crypto Fund Index, has returned 6219%. Bitcoin is up 4448% during this same period. Much of the index's historical outperformance has occurred during bearish market conditions like those in Q2, 2021. Crypto funds slightly underperformed Bitcoin in Q3.

CFR Crypto Fund Index vs. Bitcoin
December 31, 2016 - September 30, 2021

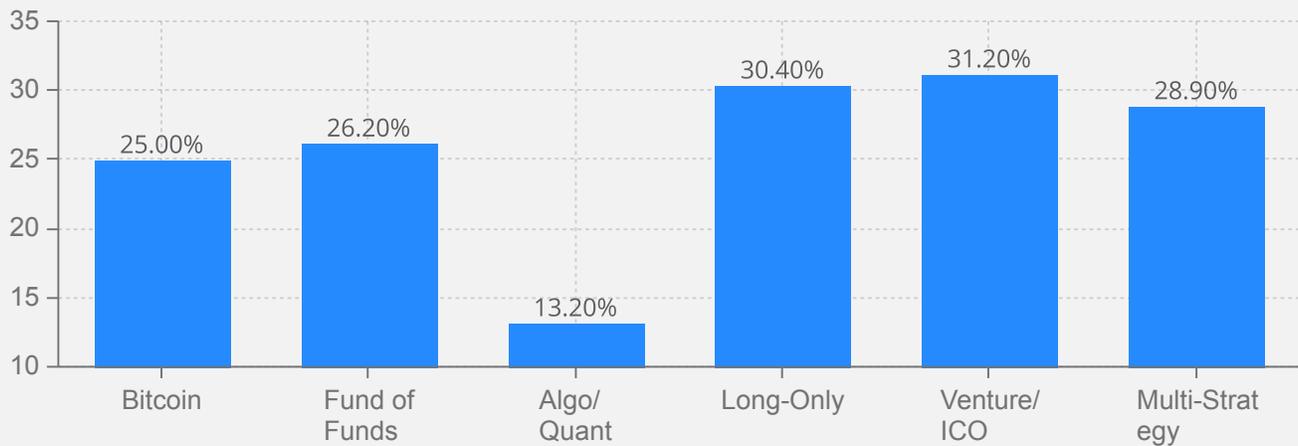


For more information on the CFR Crypto Fund Index, including methodology, monthly returns, and other performance metrics, please visit <https://cryptofundresearch.com/cfr-crypto-fund-index/>

Crypto Fund Performance Data and Metrics

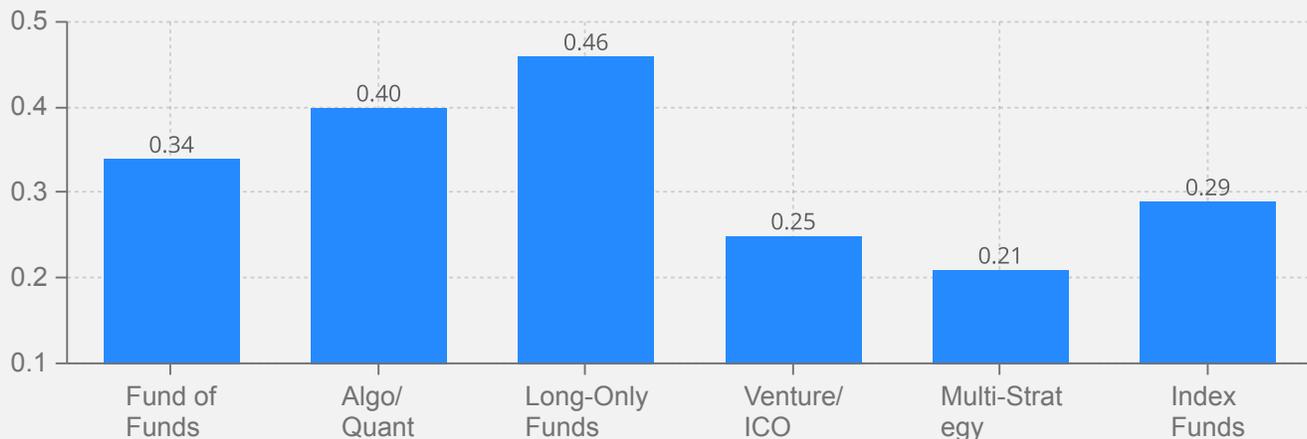
Crypto funds gained a relatively modest 23.6% in Q3. With the exception of quantitative funds, all fund strategies outperformed Bitcoin. Venture/ICO-style funds were the top performing strategy, followed closely by Long-Only funds.

**Q3 2021 Crypto Fund Performance
By Fund Strategy**



Beta is used in traditional finance to measure market based risk and, by using Bitcoin as a proxy for market returns, allows us to determine how much of a given fund strategy's returns could be simply due to market exposure to Bitcoin. Long-only crypto funds tend to have the highest beta, while multi-strategy funds tend to have the lowest.

**Beta / Relationship to Bitcoin
Q1 '17 - Q3 '21 by Fund Strategy**

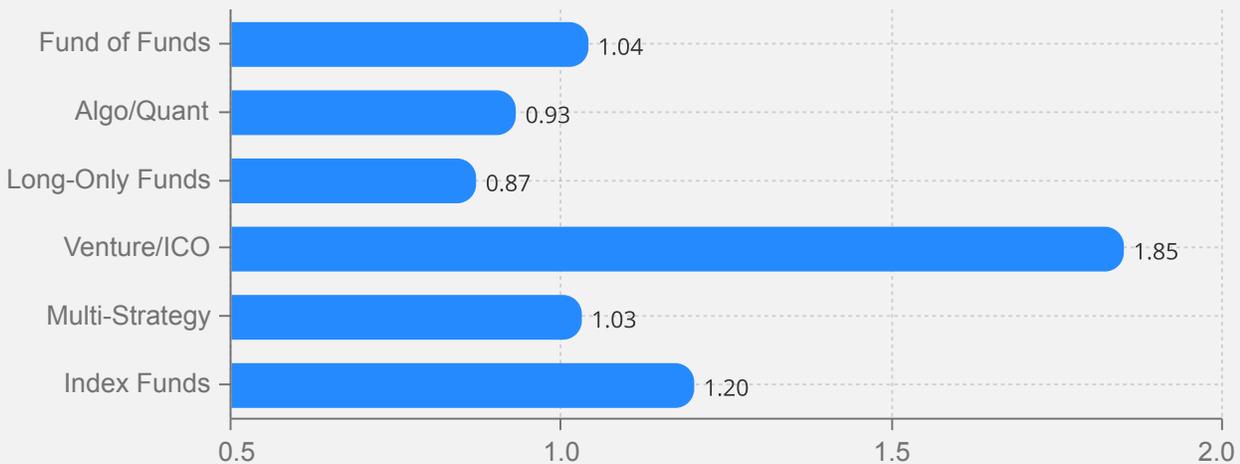


Crypto Fund Performance Data and Metrics

"Skew" captures the shape of the distribution of returns and can be defined as the extent to which returns vary from a normal distribution. Most crypto fund strategies demonstrate a positive skew, or a longer or fatter tail on the right. It's important to keep in mind that the accuracy of skew calculations depend on large quantities of return data, which are not necessarily available for most crypto funds.

Median Skew Across Fund Style

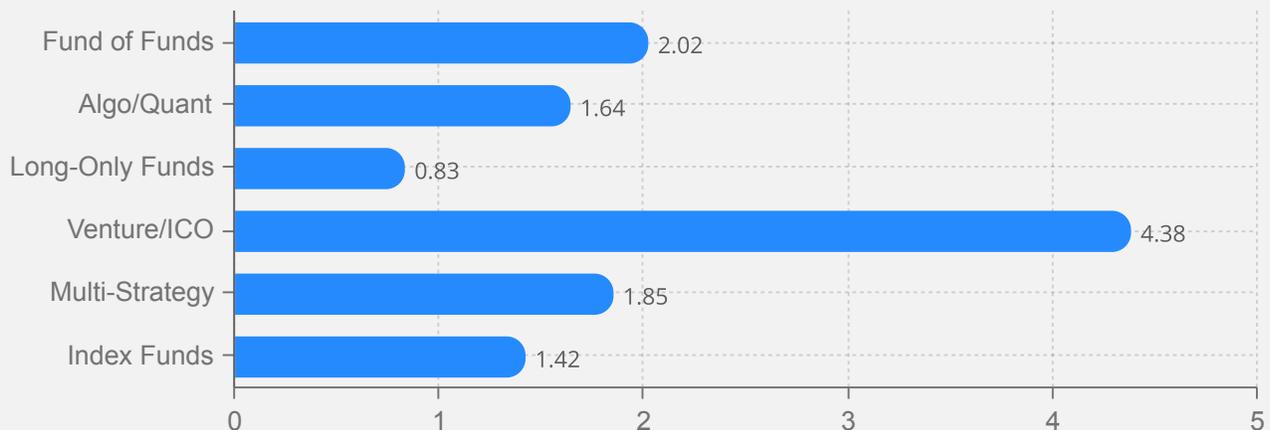
Q1 '17 - Q3 '21 by Fund Strategy



Like skew, kurtosis is a measure of returns relative to a normal distribution. Kurtosis measures the size of extreme returns compared to a normal distribution of returns with a positive kurtosis captures the size of these extreme returns. The kurtosis of a normal distribution is 3.

Median Kurtosis Across Fund Style

Q1 '17 - Q3 '21 by Fund Strategy

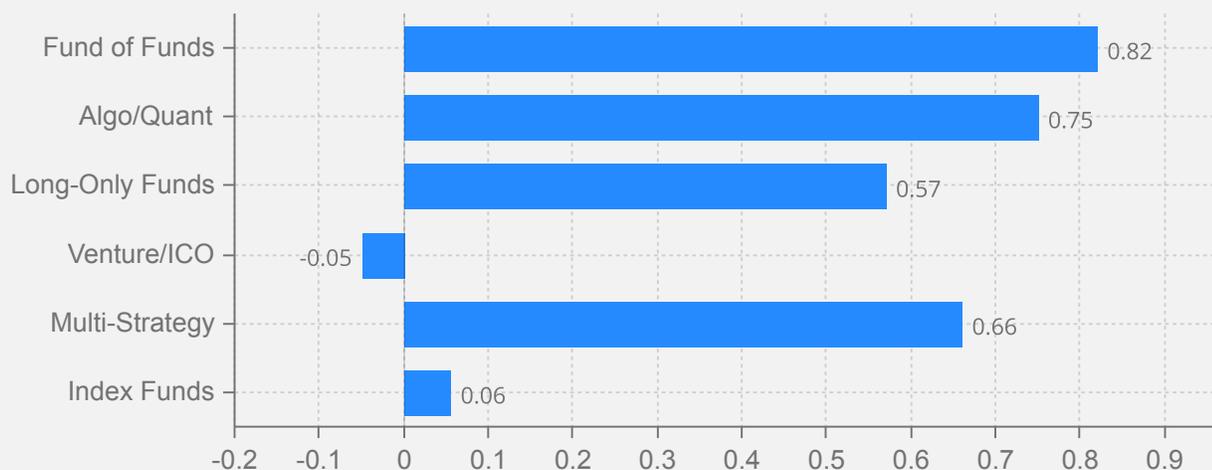


Crypto Fund Performance Data and Metrics

The Sharpe Ratio is a performance metric often used by investors to help them better understand the relationship between risk and returns of an investment. When comparing like investments, a higher Sharpe Ratio may indicate a better return relative to the amount of risk taken. Sharpe Ratio's can use either arithmetic or geometric returns. We use geometric returns in our calculation below.

Median Sharpe Ratio Across Fund Style

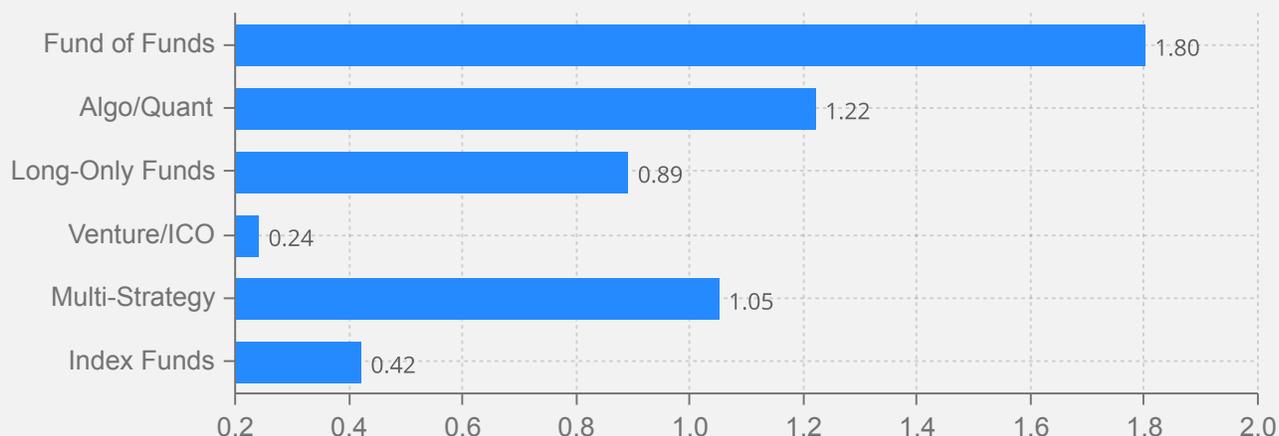
Q1 '17 - Q3 '21 by Fund Strategy



Like the Sharpe Ratio, the Sortino Ratio helps investors understand the relationship between risk and returns of an investment. However, the Sortino Ratio focuses solely on the risk (standard deviation) or negative returns. By using only negative returns, the Sortino Ratio can help investors identify bad/downside risk, while ignoring good/upside risk.

Median Sortino Ratio Across Fund Style

Q1 '17 - Q3 '21 by Fund Strategy



Crypto Fund Performance Data and Metrics

Q3 '21 Crypto Fund Research Performance Awards

Crypto Fund Research tracks the performance of more than 160 crypto funds - primarily crypto hedge funds, fund of funds, and hybrid funds. At the end of each quarter and year, we announce awards for the top performing funds in each period, net of fees.

Below are the Crypto Fund Research Performance Award winners for Q3, 2021:

Top Performing Crypto Funds Overall, Q3 2021



Top Performing Crypto Funds by Strategy, Q3 2021



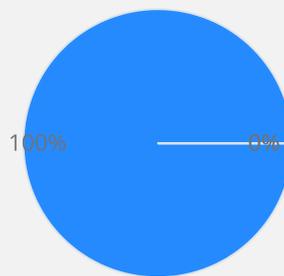
For additional award winners please visit: <https://cryptofundresearch.com/crypto-fund-performance-awards/>

Crypto Fund Survey

A recent survey of over 60 crypto funds was conducted to gauge investor sentiment and provide further insight into the crypto industry. The survey covers crypto venture funds, hedge funds, hybrid funds, index funds, and fund of funds and was conducted between July 12 and August 23, 2022. Full survey results here: <https://cryptofundresearch.com/2021-crypto-fund-survey/>

Do You Anticipate Your Fund Will Increase AUM in 2021?

All Fund Types

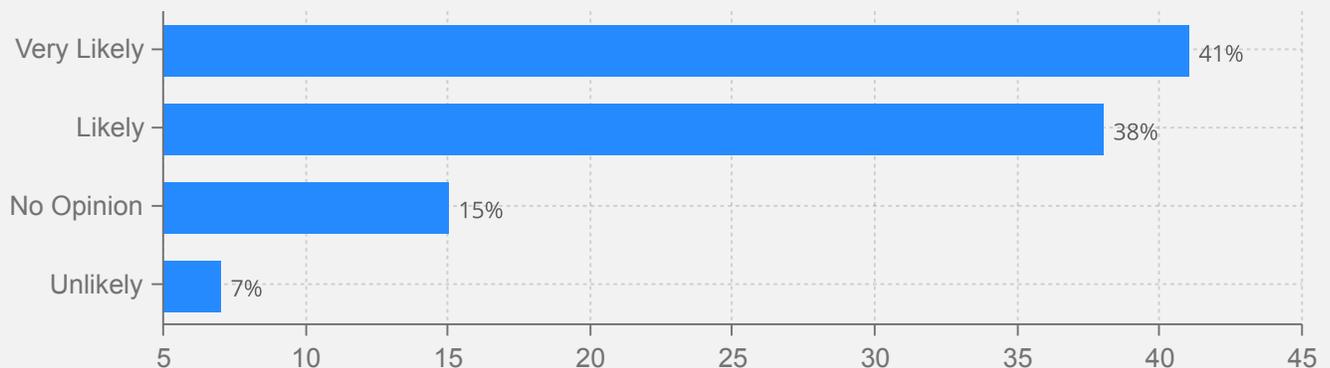


Crypto Fund assets under management (AUM) have continually grown since 2018 and recently approached \$60 billion. It may therefore come as no surprise that most crypto funds anticipate growing AUM in 2021. However, unlike in our 2020 survey where almost 10% of funds were unsure or did not expect to grow AUM, 100% of funds surveyed expected to grow AUM in 2021.

78% of crypto funds think its likely or very likely that Bitcoin will surpass its all-time-high price of approximately \$64,000 USD in the next 12 months (this is more than double the average price at the time of the survey). Crypto funds are significantly more bullish than in 2020 when about 60% thought Bitcoin would more than double over the following 12 months.

Will Bitcoin Reach ATH of \$64,000 by June 30, 2022?

All Fund Types



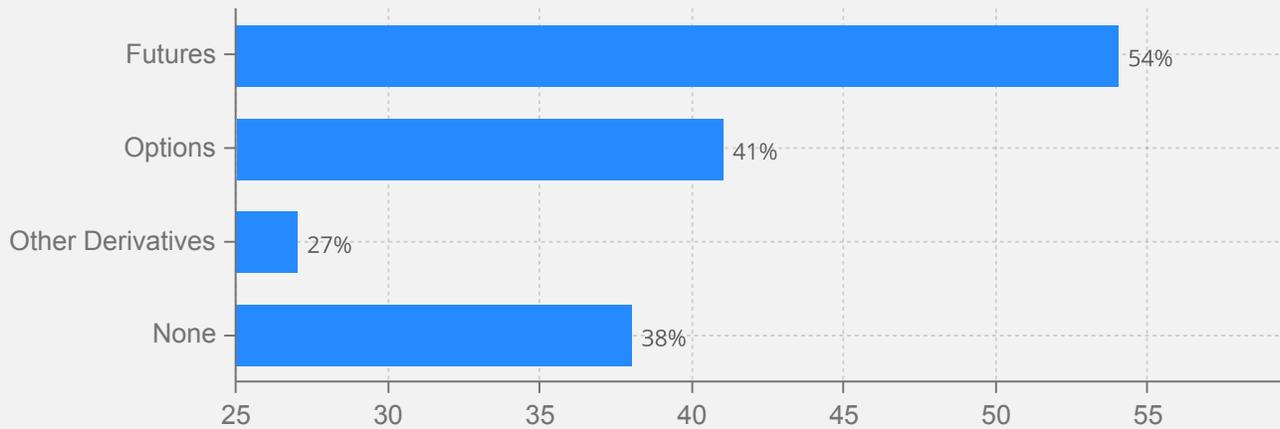
Crypto Fund Survey (cont.)

The majority of crypto hedge funds and hybrid funds use some sort of derivative product either for risk management, leveraged exposure, or other purpose. A little over three quarters of both crypto hedge funds and hybrid funds use derivatives, with hedge funds more likely to use futures and hybrid funds more likely to use options or other derivatives. Venture funds are least likely to use derivatives.

Nearly two thirds of crypto funds use at least one derivative product with futures and options being the most common.

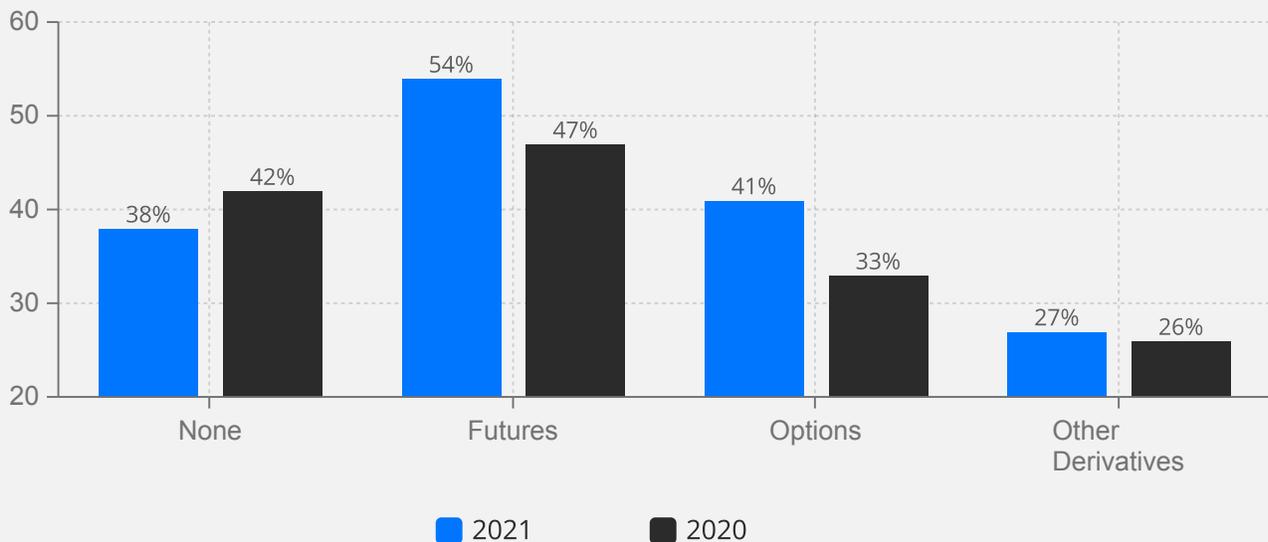
Does Your Fund Utilize Derivative Products?

By Fund Type



Crypto Fund Derivative Use

2021 vs. 2020

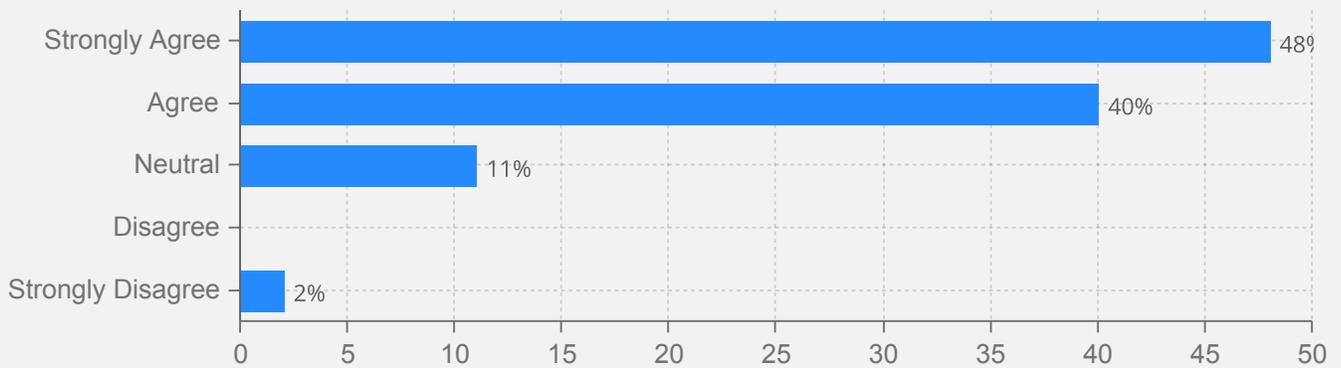


Crypto Fund Survey (cont.)

Derivatives play a vital role in investment strategies, according to most respondents. The survey results reveal that roughly 88% of crypto funds agree that derivatives and structured products are healthy components of the crypto industry. Only 2% of crypto funds disagree on the benefits of these securities in the crypto industry, citing counterparty risk and the misuse of these products as the primary rationales against their usage.

Derivatives are Healthy Part of the Crypto Investment Space

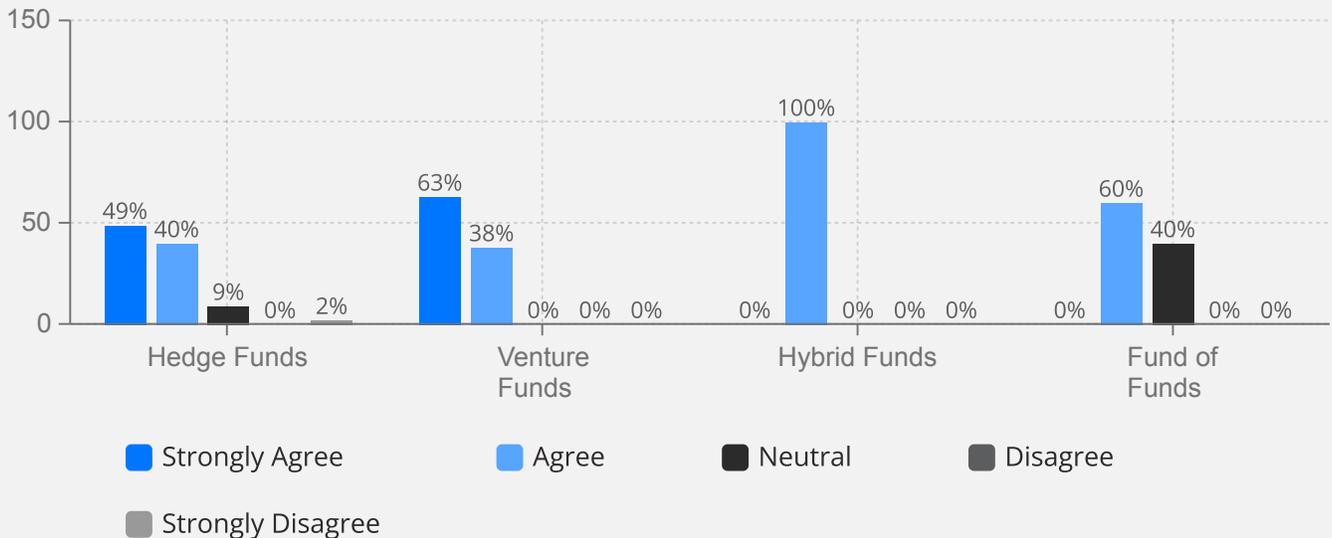
All Fund Types



Fund of funds are least likely to believe derivatives are healthy for the crypto investment space. This may be due to fund of funds rarely using such products (even if the funds they invest in often do)

Crypto Funds View Derivatives as Healthy for Space

By Fund Type

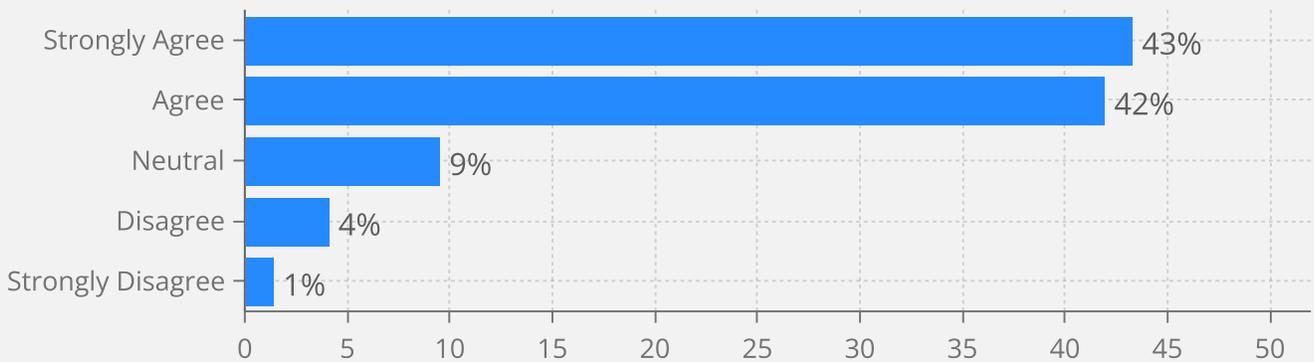


Crypto Fund Survey (cont.)

Derivatives play a vital role in investment strategies, according to most respondents. The survey results reveal that roughly 85% of crypto funds agree that derivatives and structured products are healthy components of the crypto industry. Only about 5% of crypto funds disagree on the benefits of these securities in the crypto industry, citing counterparty risk and the misuse of these products as the primary rationales against their usage.

Derivatives are Healthy Part of the Crypto Investment Space

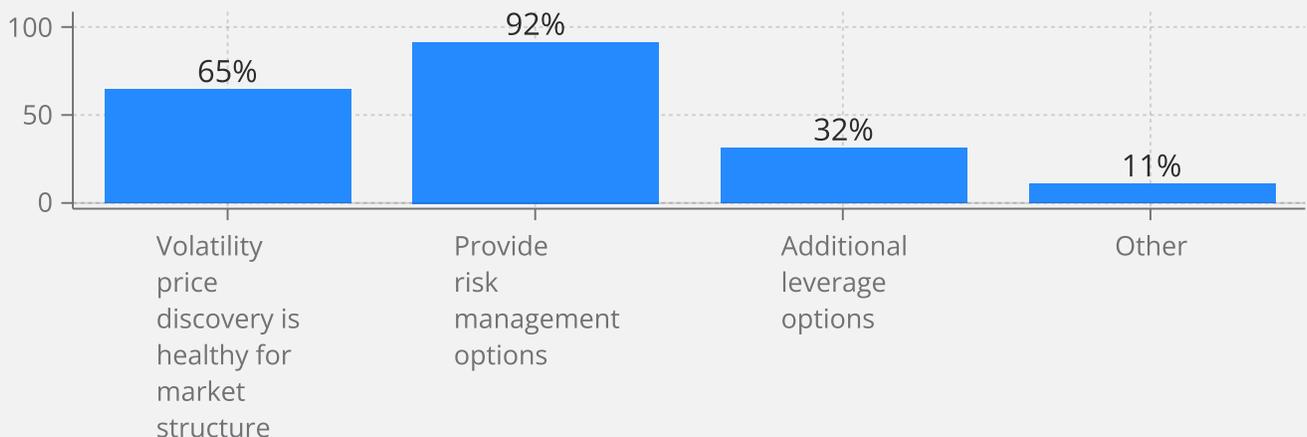
All Fund Types



The risk management benefit of derivative and other structured products was the most cited rationale for why these instruments are beneficial for the crypto industry. Approximately 92% of funds cited risk management options, regardless of fund category and size. Volatility price discovery, and its benefit to market structure, is the second most cited reason. Only about 32% of crypto funds highlighted the additional leverage options that these instruments provide as a rationale for using derivatives and structured products.

Why are Derivatives a Healthy Part of the Crypto Investment Space?

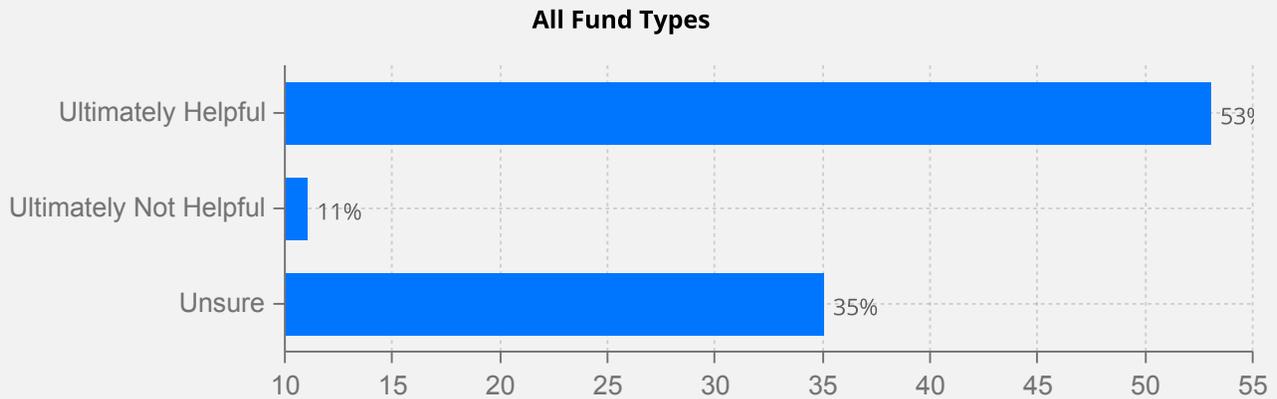
Top Responses, All Fund Types



Crypto Fund Survey (cont.)

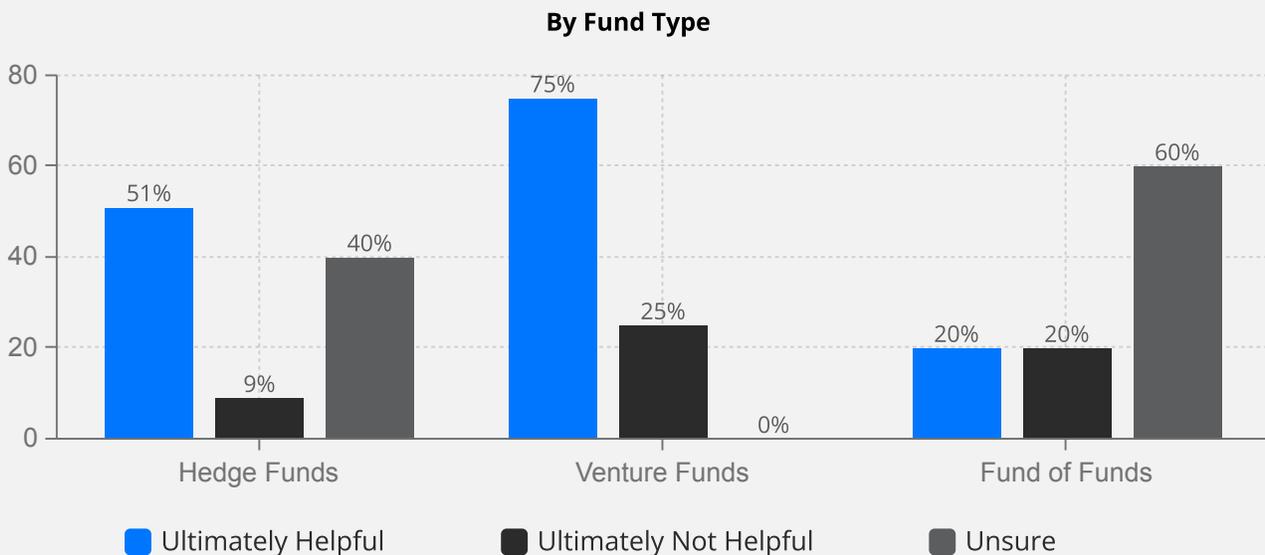
We asked respondents whether China's ban on cryptocurrency mining would be helpful or harmful to the long term success of cryptocurrencies like Bitcoin. The overwhelming majority of crypto funds believe the mining ban will ultimately be helpful.

Crypto Fund Views on Impact of China's Mining Ban on Long-Term Success of Bitcoin



While many funds remain agnostic or unsure of the long-term effects of China's ban on cryptocurrency mining, the overwhelming majority of funds expressing an opinion believe the ban will ultimately be helpful to the long-term success of Bitcoin. Venture funds were most likely to think the ban would be helpful, but also most likely to see it as unhelpful.

Crypto Fund Views on Impact of China's Mining Ban on Long-Term Success of Bitcoin

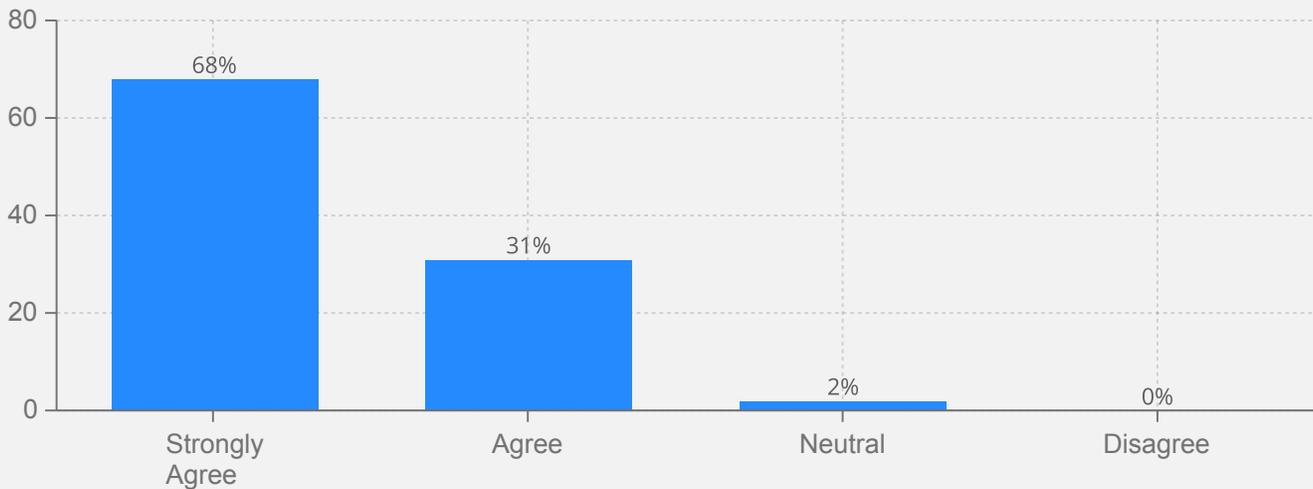


Crypto Fund Survey (cont.)

The results concerning institutional interest in cryptocurrencies are largely consistent across crypto fund types - nearly all crypto funds agree that institutional interest in crypto investments increased in the first half of 2021.

Institutional Interest in Crypto Investments Has Increased in H1 2021

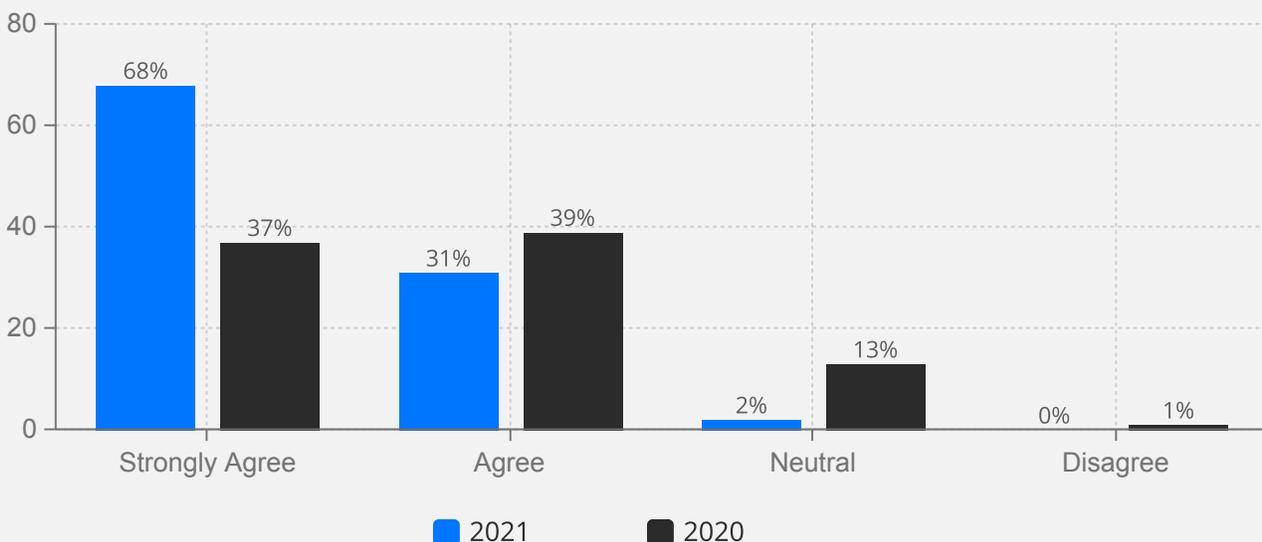
All Fund Types



Compared with the same question last year, crypto funds were significantly more likely to report an increase in institutional interest in 2021.

Crypto Funds Believe Institutional Interest in Crypto Increased in First Half of Year

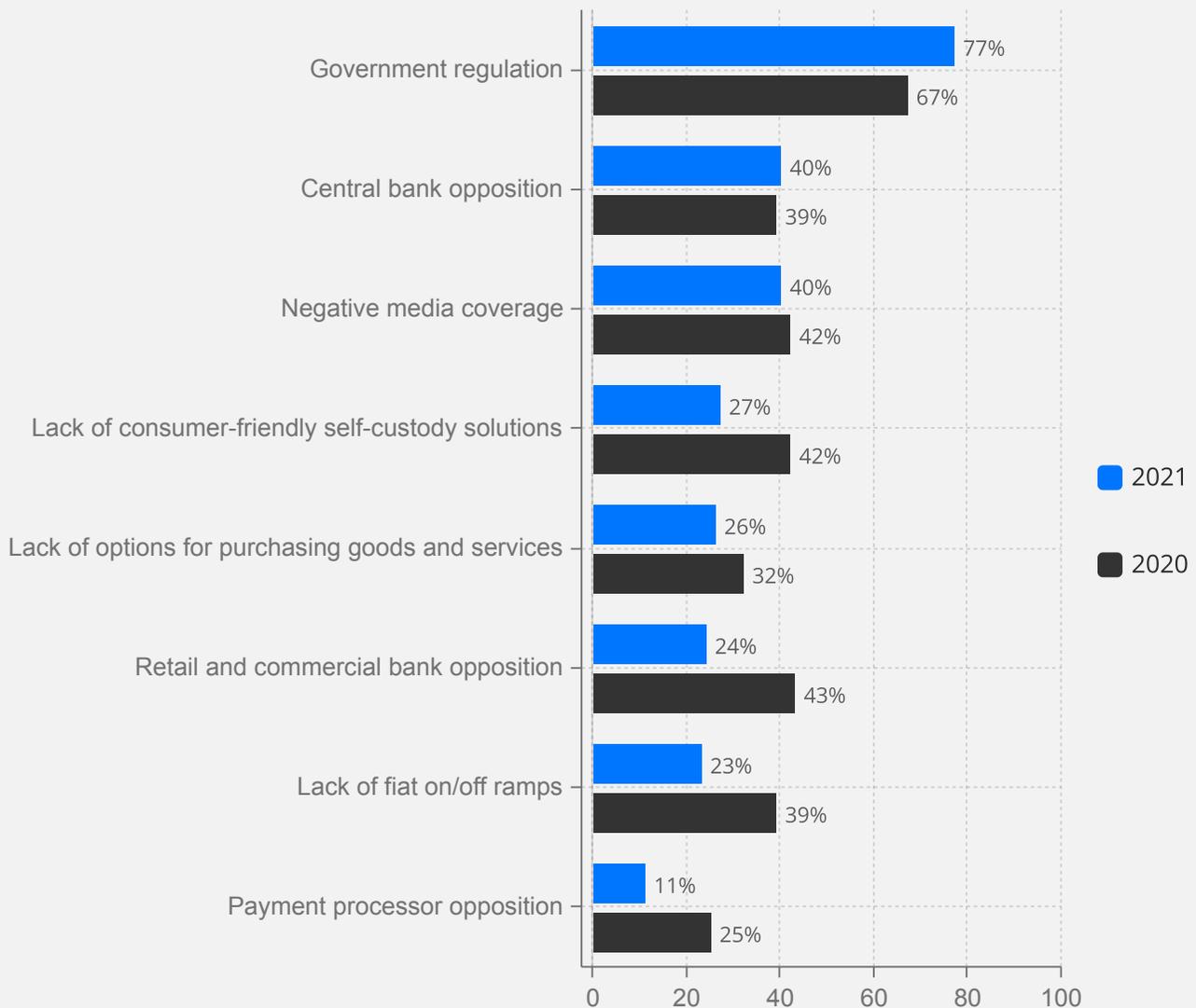
2021 vs. 2020



Crypto Fund Survey (cont.)

While crypto investors believe that institutional interest has and will continue to increase in 2021, there are several obstacles that continue to prevent the widespread adoption of cryptocurrencies.

Crypto Fund Views of Top Obstacles to Widespread Crypto Adoption
All Fund Types



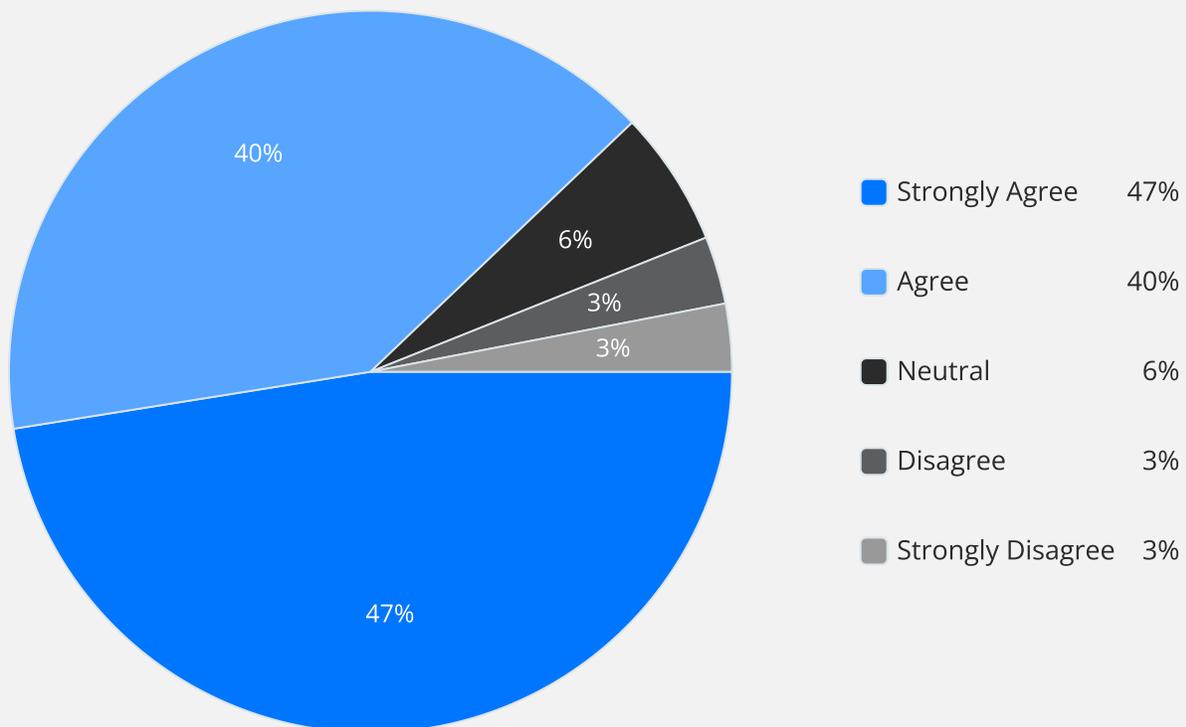
Crypto funds continue to report that government regulation is the largest obstacle to widespread adoption of cryptocurrencies.

Crypto Fund Survey (cont.)

A question on the role of increased money supply and inflation expectations in shaping crypto adoption, particularly as a store of value, was added to our survey for 2021. 87% of funds believe such increases will drive adoption while only 4% disagree.

Though not shown above, there was no disagreement from funds based in Europe/Other. Funds based in Asia were somewhat more likely to disagree.

Crypto Funds Agree Increases in Money Supply and Inflation will Drive Crypto Adoption All Fund Types



Crypto Fund Survey (cont.)

Thank you to the more than 60 crypto fund respondents that completed our survey including:



Altana Digital Currency Fund
ARCA
Astronaut Capital
Baekdu Technologies
Belton Capital
Bitrock Capital Partners, LP
BKCoin Capital
Blockchain Coinvestors
Blockchain Strategies Fund
Blockforce Capital
Bohr Arbitrage Crypto Fund
Cambrian Asset Management
CityBlock Capital
Coincident Capital
Crypto Fund AG
Dfi Labs
Digital Capital Management
Galois Capital
Hartmann Capital
Icoinic Algorithmic Fund
Kenetic
Lavalieri Capital Management
Leonidas Cryptocurrency Fund

Liberty Bitcoin Fund
Liquibit USD Market Neutral Arbitrage Fund
M31 Capital
MaiCapital - Blockchain Opportunity Fund
MVPQ Limited
NamNar Alternatives fund lp
ODIN88 Elite Crypto Fund
Off the Chain LP
Permian Capital Fund, LP
ProChain Capital
Protein Capital Fund
Proxima Investments
Pure Crypto LP
Pythagoras Investment Management LLC
Rivemont Crypto Fund
S2F CAPITAL LP
Smart Index Crypto Fund Limited
Stylus Capital
Tally Capital
The Bitcoin Fund (TSX:QBTC)
Tradecraft Crypto Asset Fund
Waterdrip Capital

About the Report

About Crypto Fund Research:

Crypto Fund Research is an independent research firm founded in 2017. The firm focuses exclusively on crypto funds, including crypto hedge funds, venture capital funds, hybrid funds, index funds, fund of funds, and managed accounts. Crypto Fund Research provides a variety of free research and market intelligence, maintains the CFR Crypto Fund Index, and provides the largest and most comprehensive [database of crypto fund performance](#).

For partnership opportunities, or to be included in our next survey, please contact us at [institutional\(at\)cryptofundresearch.com](mailto:institutional(at)cryptofundresearch.com)

The content contained in this report is for general information purposes only and should not be used as a substitute for consultation with professional advisors. Material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. The material is not intended to be used as a general guide to investing, or as a source of any specific investment recommendations, and makes no implied or express recommendations concerning the manner in which any client's account should or would be handled, as appropriate investment strategies depend upon the client's investment objectives. Data may be subject to revision.

© 2021 Crypto Fund Research