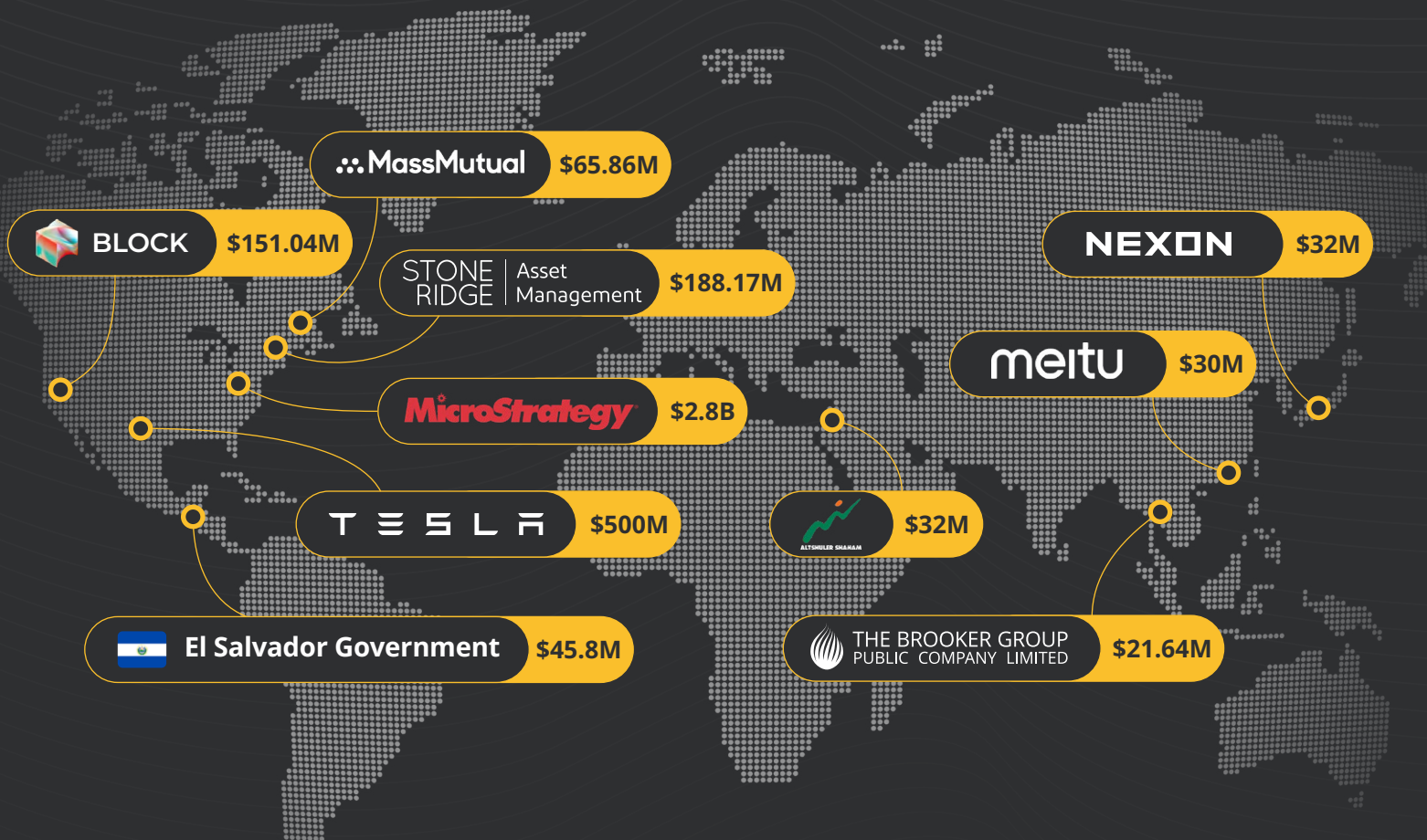


Institutional Demand for Cryptocurrencies

Global Survey 2022



FLOW ■ TRADERS

sFOX

Zeltner&Co

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GMI Gonna Make It! MAKE IT HAPPEN

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Analysis Overview



Cointelegraph's second annual survey found that **62% of professional investors currently hold digital assets (43%) or plan to buy them in the future (19%)**. There were three surveys done on professional investment in cryptocurrencies in 2022 including studies conducted Cointelegraph, Bitwise, and Nickel Asset Management. On average, 45% of the institutions surveyed have exposure to cryptocurrencies.



In total, the respondents manage **\$316 billion** in assets, 3.3% of which, or approximately **\$10.43 billion, is invested into cryptocurrencies**.



Institutional investors including **public corporations and governments own 1.39 million+ BTC equal to 7.2% of the circulating supply**.



Professional investors are primarily holding **Bitcoin (94%) and Ether (75%)**. Institutions are also interested in security tokens (31%) and stablecoins (31%). Smaller holdings included Polkadot (**DOT**) (25%), Solana (**SOL**) (13%) and Litecoin (**LTC**) (13%). Several investors mentioned they are also interested in publicly traded blockchain stocks.



Institutional investors are more likely to buy Ether than Bitcoin in the next 12 months. 62% of investors say Ether is on their buy list compared to only 54% for Bitcoin.



Regulations are stopping one out of four professional investors from buying Bitcoin. Regulations continue to be an obstacle to further adoption.

Analysis of Cryptocurrency Financial Markets and Products

- Survey results show that a slim majority of investors (55%) prefer to hold cryptocurrencies directly. Interestingly, professional investors prefer to buy a regulated fund before buying structured products or trading futures. Active strategies beat out passive strategies by a narrow margin.
- **Institutional investors account for 79% of Coinbase's daily trading.**
- **Perpetual futures markets are 5 to 10 times as liquid as spot markets.**
- Most institutional investing is still done via passive funds, **with more than 90% dominance by Grayscale's Bitcoin Trust.**
- There are **more than 800 digital asset funds** across 80 countries.
- Ethereum's options open interest (\$5 billion) recently surpassed Bitcoin's (\$4.8 billion) indicating that sophisticated traders are more interested in speculating on Ethereum.

Findings by Geography

- **Asia is the clear leader in the institutional adoption of digital assets**, while Europe and the U.S. are lagging behind at about the same pace.
- **Switzerland is ranked as the No. 1 jurisdiction for investment worthiness** followed by the United States and Liechtenstein.

Blockchain Venture Capital Report

Explore

Nonfungible Tokens: A New Frontier

Explore

GameFi: Can blockchain- based gaming redefine the industry?

Explore



Raphael Spannoch



Michael Tabone



Igor Kravchenko



Mark Mason

Dear Partners, Investors, and Friends,

The institutions are here, and they are buying the dip. Blackrock, the largest asset manager in the world with \$10 trillion in assets, just announced its [second blockchain ETF](#), one month after the debut of its first one. Goldman Sachs took on principal risk in a crypto OTC trade for the first time with Galaxy Digital. Goldman Sachs now has a part of its website dedicated to the [investment case for cryptocurrencies](#) and the metaverse. The largest hedge fund in the world with \$140 billion in assets under management, Bridgewater Associates, announced [they were backing a Bitcoin fund](#). Fidelity is weighing a plan to allow its brokerage customers—some [34.4 million individual investors](#)—to trade the world's largest cryptocurrency. Citadel, Brevan Howard, Investment Bank Cowen—soon, the list of institutional investors in crypto will be longer than the list not involved. Not only will these institutions bring liquidity to the cryptocurrency space, but they also hold significant power in local politics and governments. Finance, insurance, and real estate lobbyist groups in the US [spent \\$539 million in 2020](#) on the regulation of public policy.

As institutions join the blockchain ecosystem, the demand for institutional-grade infrastructure is growing. The largest global banks, including JPMorgan Chase, Bank of America, and DBS Bank, amongst others, have invested in educating themselves on the topic of digital assets, and many are already venturing into offering products and services.

The entire technology stack from traditional finance is integrating the necessary tools to handle cryptocurrencies. There are custodian banks, market makers, paying agents, and clearing houses that are establishing themselves as trusted intermediaries for blockchain-based assets.

However, some key questions remain. How much of the cryptocurrency market capitalization and daily trading volume is done by institutions versus retail investors? The answer to this question helps us understand if crypto is mainly a retail phenomenon or if institutions already own a considerable chunk of the market. This report investigates the direction of the capital flow. Are professional traders currently buying or selling Bitcoin? Are institutions primarily interested in Bitcoin, Ethereum, or some other method for gaining exposure to blockchain technology, such as private equity or mergers and acquisitions? Do they plan to increase their exposure to blockchain over the next 12 months?

To answer these questions, Cointelegraph Research took a data-driven approach in the second annual Institutional Demand for Cryptocurrencies Global Survey 2022 Report. To gain a deeper understanding of how professional investors feel about blockchain assets, this 60+ page research report presents 32 questions about crypto assets answered by 84 wealthy investors across Asia, the US, and Europe. TLDR - 43% currently hold digital assets, and 19% plan to buy them in the future. However, their favorite cryptocurrency for future investment was unexpected. Overall, many institutional investors are already in the market, and new ones are joining daily.

We hope you enjoy reading our latest report, we invite you to join Cointelegraph Research to receive regular updates on the institutional adoption of cryptocurrencies. To work with Cointelegraph Research's team on creating a one-of-a-kind report, contact us at research@cointelegraph.com.

Sincerely

Demelza Hays, Ph.D.

Head of Research at Cointelegraph

Demelza Hays is the director of research at Cointelegraph, Forbes 30 Under 30, U.S. Department of State Fulbright Scholar, and former fund manager of two regulated crypto funds.



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Cointelegraph Survey of Professional Investors

This report presents the survey results of Cointelegraph's second annual survey of professional investors from traditional finance (TradFi). This survey provides a comprehensive record of the cryptocurrency investments of professional investors, including changes in their attitudes toward digital assets and their future allocation plans.

The main findings confirm the rumors that institutions are investing in cryptocurrencies. **Over the last two years, the percentage of institutional investors that have bought**

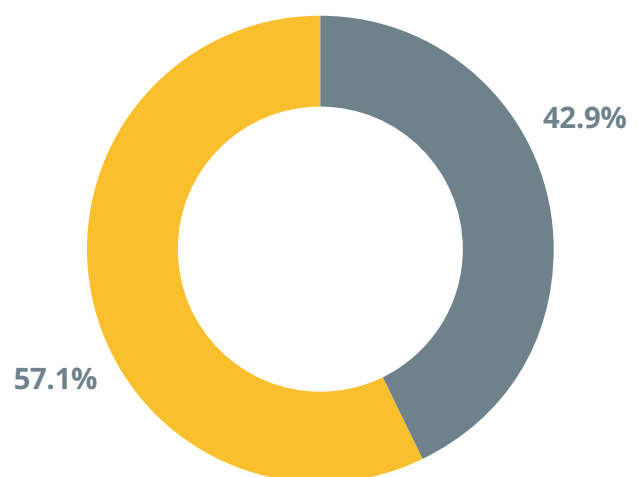
cryptocurrencies has increased by 22%. The new survey shows that 43% of professional investors have invested in cryptocurrencies, up from 36% in 2020, and that 19% plan to buy them in the future.

Out of the 48 respondents that reported they do not currently own crypto assets, 16 of them said they plan to invest in crypto assets in the future. This means that the majority (62%) of the professional investors that responded to this survey are interested in having digital assets in their portfolio.

43% of professional investors have owned cryptocurrencies, 19% plan to buy it in the future

Figure 1 Has Your Company Invested in Crypto Assets Before?

■ Yes ■ No



Source: Cointelegraph Research

Methodology

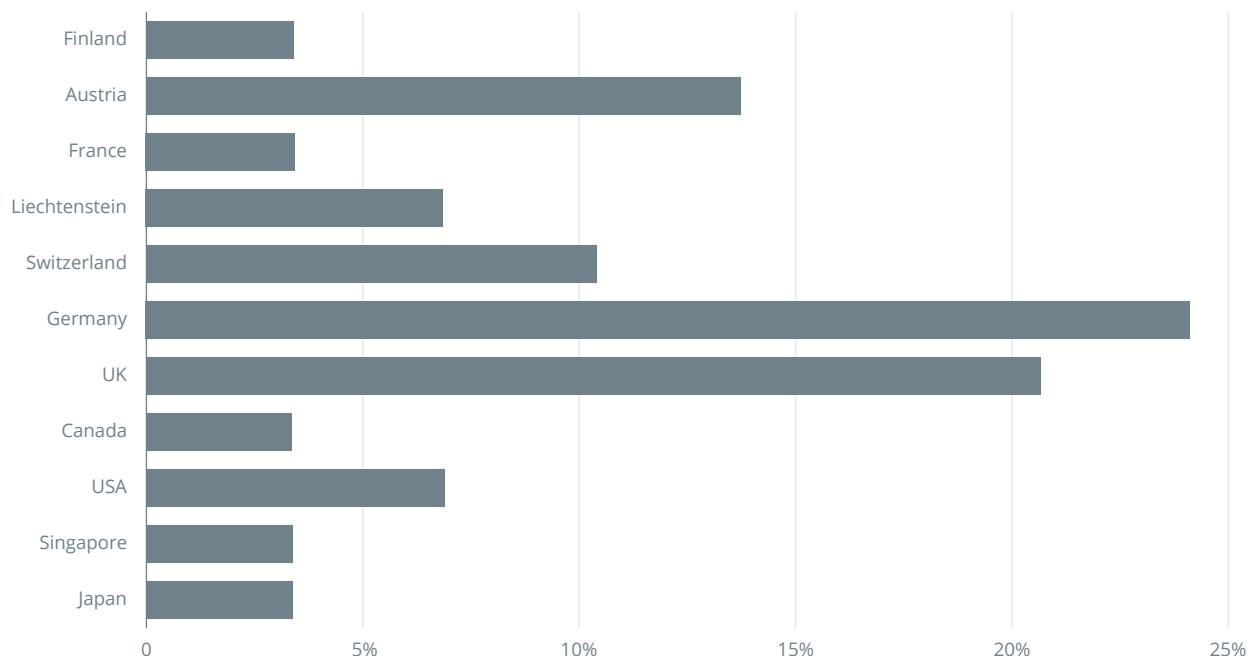
This survey had 84 responses from professional investors across the world, with a focus on the United States, Europe and Asia. Respondents included traditional banks, asset managers and pension funds. This report focuses on buy-side, not sell-side, asset allocators. Therefore, we did not send this survey to crypto funds that are 100% invested in digital assets. The goal of this report is to gauge the demand for digital assets from traditional financial intermediaries.

The survey was delivered via email to 6,004 registered professional investors with the financial market authority in 11 countries: Japan, Singapore, the U.S., Canada, the United Kingdom, Germany, Austria, Switzerland, Liechtenstein, France and Finland. Investors were given a two-week period to respond in July 2022.

The majority of respondents came from Germany and the U.K., followed by Austria and Switzerland.¹ When sorting the survey results by country, the respondents from the U.K. managed the most assets. **In total, the respondents manage \$316 billion in assets, 3.3% of which, or approximately \$10.42 billion, is invested in cryptocurrencies.** Austria's respondents worked in firms with the highest headcount. The majority (83%) of respondents worked in firms with fewer than 50 employees. Only one woman in charge of asset allocation decisions at her company responded to the survey compared to 81 men.² The median age of the respondent was 48.8 years old.

\$10.42 billion in cryptocurrency exposure by survey respondents

Figure 2 Nationality of Professional Investor Survey Respondents



Source: Cointelegraph Research

¹ Some respondents did not specify their location. Their answers are not included in this chart.

² Some respondents did not specify their gender.

Surveys of Professional Investors Find 45% Have Exposure to Cryptocurrencies

Total institutional holdings of cryptocurrency through trusts and funds was estimated to be \$62.5 billion at the end of 2021, according to CoinShares.³ This number does not include direct Bitcoin (BTC) holdings, worth more than \$10 billion, as of March 31, 2022, or venture funding volume, worth \$25.1 billion in 2021.⁴

Out of the 19.15 million BTC in circulation, an estimated 7.54% (1,444,201) are held by institutional investors⁵ ranging from publicly traded companies, such as Tesla, private companies, such as the insurance provider MassMutual,⁶ exchange-traded funds (ETFs), such as VanEck, to countries, such as El Salvador.

“

I still have my skepticism, but there are hundreds and millions of people in this world today who disagree with that... To the extent that we're trying to help institutions and investors solve their portfolio allocation problems, we have to give serious consideration to being a market maker in crypto... It is fair to assume that Citadel will begin to engage with cryptocurrencies over the months to come.⁷



Ken Griffin, CEO of Citadel | AUM +\$50 Bn

 CITADEL

However, institutional interest is difficult to measure directly. Quantifying the largest traditional financial investors in cryptocurrencies is difficult because many institutional investors do not disclose their holdings of cryptocurrencies publicly. Furthermore,

many institutional investors have indirect exposure to cryptocurrencies and blockchain technology via the stocks that they hold. Instead, surveys can be used to estimate the real magnitude of institutional cryptocurrency holdings.



The Institutional Investor Digital Assets Study

Read "[The Institutional Investor Digital Assets Study](#)"

According to the survey by Fidelity, slightly more than half (52%) of institutions surveyed across Asia, Europe and the U.S. have already invested in cryptocurrencies.⁸ The results of Cointelegraph Research's survey corroborate the findings of Fidelity's 2021 survey of its professional investor clientele.

52% of Fidelity's survey respondents have invested in cryptocurrencies

³ See [CoinShares: Digital Asset Fund Flows](#)

⁴ <https://beincrypto.com/2021-year-of-institutional-bitcoin-adoption-as-vc-crypto-funding-hits-25b/>

⁵ <https://buybitcoinworldwide.com/treasuries/#private>

⁶ <https://www.massmutual.com/about-us/massmutual-financial-summary>

⁷ See <https://fortune.com/2022/03/03/billionaire-ken-griffin-changes-crypto-stance/>

⁸ See [Fidelity: Digital Assets Survey](#)



How Professional Investors Perceive Crypto in 2022 and Beyond

Read [“How Professional Investors Perceive Crypto in 2022 and Beyond”](#)

In addition to Fidelity’s survey, there have been four other surveys done of professional investment in cryptocurrencies. The 2022 Nickel Digital Institutional

Investor Survey⁹ interviewed more than 100 investors representing more than \$110 billion in assets under management (AUM).

Figure 3 December 31, 2012 – 2021 (9 Years Observation)

Balanced Portfolio	60 / 40 portfolio	59 / 40 +1% Bitcoin	57 / 40 +3% Bitcoin	55 / 40 +5% Bitcoin
Cumulative Total Return, %	160.2	188.8	255.2	335.7
Annualised Return, %pa	11.2	12.5	15.1	17.8
Annualised Risk	9.8	9.8	10.1	10.6
Sharpe Ratio	1.08	1.21	1.44	1.62
Max Drawdown, %	21.6	21.6	21.8	22.1

Source: Nickel Digital Institutional Investor Survey

Nickel Digital Asset Management pointed out in their report, *How Professional Investors Perceive Crypto in 2022 and Beyond* that a single digit allocation to Bitcoin of 1% to 5% has a strong positive impact on portfolio performance. This can be seen in Figure 3 with a doubling of return by adding 5% of Bitcoin to a 55% stock and 40% bond portfolio. Similarly, Cointelegraph’s survey presented in this report found that professional investors had 3.3% of their portfolio invested in cryptocurrencies on average.

Similar to our findings, Nickel reports:

- 91% of professional investors believe digital assets are becoming more mainstream.
- 19 surveyed companies have invested in Bitcoin with over \$60 billion worth of BTC held.
- 75% of the digital assets are held in North America (U.S. and Canada).
- 78% of the key personnel surveyed have a positive view about digital assets.
- 47% say improved custody is one of the key drivers of sentiment shift.

- 25% have more than doubled their holdings in the last year.
- 38% believe their funds will hold between 5%–10% of assets in crypto.
- Exploiting market inefficiencies was the No. 1 alpha for 69% of investors surveyed.
- 79% cited security concerns for holding them back.
- 67% cited volatility concerns.
- 56% said low market capitalization meant reduced liquidity.
- 46% had regulatory concerns.

That security and liquidity concerns trump regulatory, and the legal risk outlook was the most surprising takeaway from this report in our view. This would mean that good custodian services with proven track records and improved derivatives offerings could be crucial to bring more institutional investors to the digital asset market.

Both of these will take time, but we have seen multiple promising offerings under development and are cautiously optimistic this space will see drastic improvements in the next 12 months.

⁹ See [Nickel Digital Survey, Professional Investors](#)



3rd Annual Global Crypto Hedge Fund Report 2021

Read
["3rd Annual Global Crypto Hedge Fund Report 2021"](#)

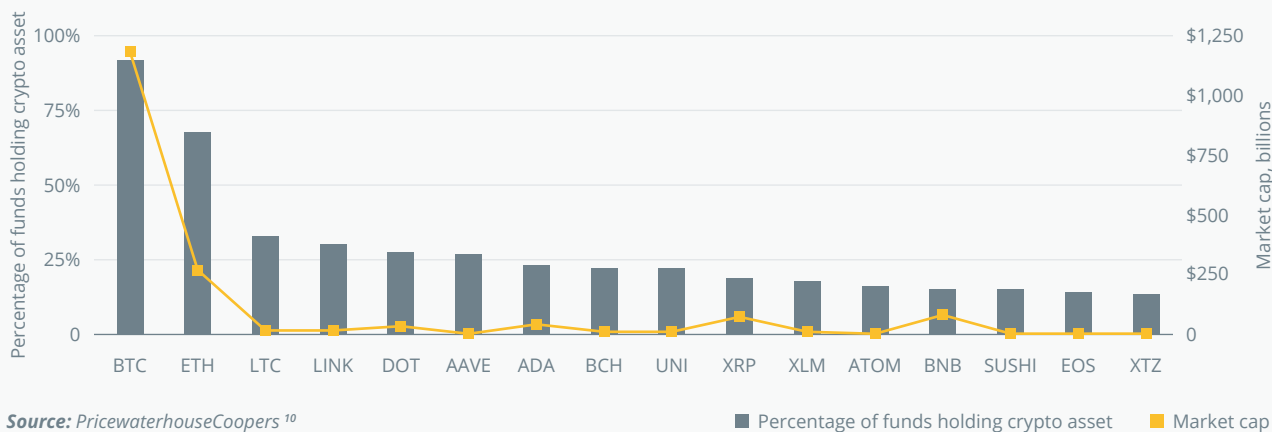
The second survey report is the Annual Global Crypto Hedge Fund Report 2021 by PricewaterhouseCoopers. Since PwC's report focuses on 2020–2021 investments, returns are not representative of current market conditions and have been omitted from this report. There are still a number of very interesting facts we have discovered.

- In 2020, use of custodians by institutional investors decreased from 81% to 76%, indicating that institutions are more active in protocol governance, something that custodians usually do not actively support.
- Digital asset funds were incorporated in the Cayman Islands (34%) and the U.S. (33%) for the most part.
- Contrary to Nickel Digital's more recent report, 82% of the participants cited regulatory concerns as one of the biggest challenges.
- 2020 saw a distinct reduction in quantitative digital

asset investment strategies in favor of discretionary long and short holdings by hedge funds.

- Investments were driven by family offices and high net-worth individuals with just 23 investors per fund (median).
- Investments were dominated by BTC and Ether (ETH) holdings, displaying the kind of power laws we've been seeing in other reports as well.
- 53% of the funds permit active shorting of digital assets.
- 28% have active short positions.
- Only 56% of the hedge funds use derivatives as part of their investment execution.
- Decentralized exchanges were used but dwarfed by their centralized counterparts, with just 16% of the participants using Uniswap and 8% using 1inch.
- The average size of investment teams was 7.6 members with 2.8 years of crypto experience per team member. It seems that veterans of the initial coin offering bubble are calling the shots at hedge funds.
- Lock up in digital asset funds was one year across surveyed funds, with about 30% in hard lock.

Figure 4 Digital Assets Held by Hedge Funds



Source: PricewaterhouseCoopers¹⁰

The PwC report represents a less recent survey of the current landscape. Nickel Digital's survey portrayed a landscape where investors' regulatory concerns have

been partly addressed and investment strategies have matured. Digital asset investments are making leaps and bounds in professionalizing their operations and offerings.

¹⁰ See [https://www.pwc.com/gx/en/financial-services/pdf/3rd-annual-pwc-elwood-aima-crypto-hedge-fund-report-\(may-2021\).pdf](https://www.pwc.com/gx/en/financial-services/pdf/3rd-annual-pwc-elwood-aima-crypto-hedge-fund-report-(may-2021).pdf)



Digital assets survey

Read [“Digital assets survey”](#)

The third report we want to include is the State Street Digital Assets Survey¹¹ from October 2021. The report finds that:

- 82% of respondents are allowed to hold digital assets.
- 21% actually hold them, although most plan to increase their exposure.
- 56% expect cryptocurrencies to be common in modern portfolios within the next three years.
- Asset holdings are driven by smaller funds. Sovereign wealth funds are mostly prohibited from investing.
- Similar to the PwC report, funds prefer direct holdings for unleveraged long positions.
- Custodial solutions are the most important building block for respondents because cybersecurity concerns are paramount blockers.
- Decentralized finance (DeFi) and nonfungible tokens (NFT) are seen as the biggest drivers of disruption.
- 52% believe blockchains will enable real-time settlement in the financial markets at large.



The Bitwise/ETF Trends 2022 Benchmark Survey of Financial Advisor Attitudes Toward Crypto Assets

Read

[“The Bitwise/ETF Trends 2022 Benchmark Survey of Financial Advisor Attitudes Toward Crypto Assets”](#)

Finally, the Bitwise/ETF Trends 2022 Benchmark Survey of Financial Advisor Attitudes Toward Crypto Assets¹² report features some very promising indicators:

- 94% of financial advisors received questions about crypto from clients.
- 47% of advisors reported holding digital assets for themselves.
- Client accounts with digital assets in them grew from 9% to 16%.
- Crypto equities like Coinbase stock trumped the list of investments (46%), with Bitcoin (45%) and Ether (41%) not far behind.
- 60% reported regulatory concerns as the biggest deterrent.
- 53% viewed crypto as too volatile.
- 34% had trouble with applying valuation methodologies to digital assets.
- Apart from regulation, 46% said that better custodial solutions would make them reconsider digital assets.
- 44% wanted a spot-based ETF to invest in.

Comparing the results of the 4 surveys done in 2022 on professional investment in cryptocurrencies, 45% of institutional investors have exposure to digital assets. If there's a common ground among these reports, it is that concise regulation and good custodial solutions would unlock investments on a massive scale. These two are clearly correlated, as custodians have some

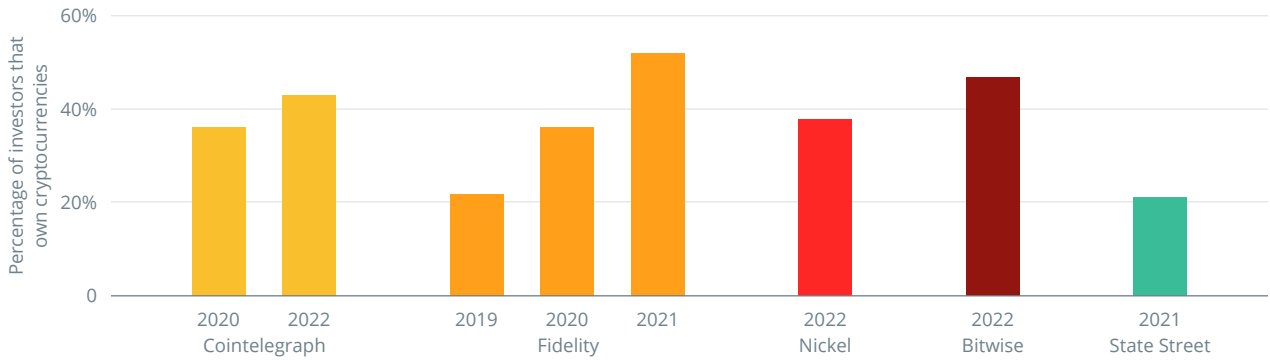
legal responsibility and are likely waiting for clarity themselves. We have seen legislation waking up to the promises and dangers of blockchain technology in the last year and hope that they can provide clarity and guidance that enables innovation while protecting investors and consumers.

¹¹ See https://www.statestreet.com/content/dam/statestreet/documents/Articles/Topline_Survey_Presentation.pdf

¹² See <https://static.bitwiseinvestments.com/Research/Bitwise-ETF-Trends-2022-Benchmark-Survey.pdf>

Figure 5 Results of Institutional Cryptocurrency Surveys

Source: Cointelegraph Research



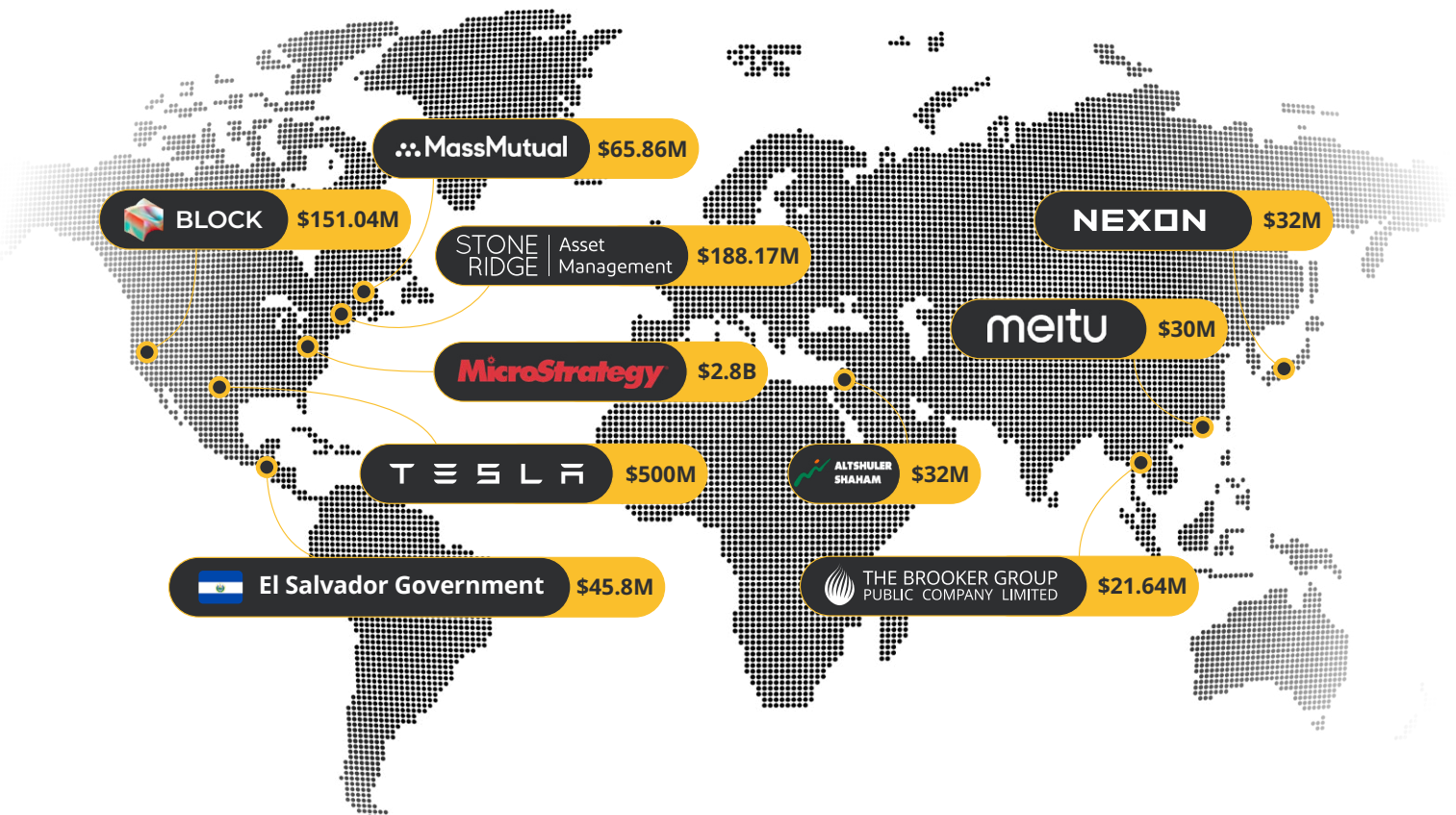
1.3 Top 10 Largest Institutional Cryptocurrency Investors

The target group for blockchain-inspired financial products includes pension funds, insurance companies, university endowments, high-net-worth individuals, family offices, asset managers, banks and funds of

funds from around the world. For Cointelegraph's list of the world's top 10 largest institutional cryptocurrency investors, we focus on TradFi companies that have disclosed their cryptocurrency holdings.

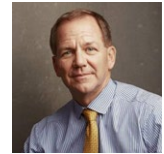
Figure 6 Map of Largest Institutional Cryptocurrency Investors

Source: Cointelegraph Research





It's a great speculation. I've just got something [over one percent of my assets in Bitcoin](#). Maybe it's almost two. That seems like the right number right now. Every day that goes by that Bitcoin survives, the trust in it will go up....I am not a hard-money nor a crypto nut. At the end of the day, the best profit-maximizing strategy is to own the fastest horse... If I am forced to forecast, my bet is it will be Bitcoin.¹³



Paul Tudor Jones, Founder of Tudor Investment Corporation | AUM \$24.9 Billion



1.4

Institutional vs. Retail Cryptocurrency Holdings and Trading Volume

An important question in the context of cryptocurrency adoption is to what extent holdings and trading volume are dominated by retail investors or institutional investors. As more activity from institutional investors demonstrates a mainstream adoption of cryptocurrencies, observers of the crypto space have a keen eye on this development.

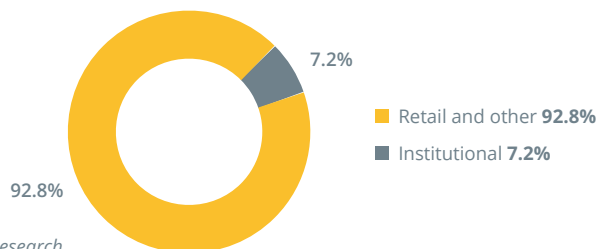
Institutions Hold 1.39 million+ BTC

Identifying the holder of a particular crypto wallet is a challenging task. While some large wallets may belong to (individual) whales, other large wallets may belong to crypto exchanges and thus represent the holdings of many investors, retail and institutional. One crypto

exchange may also own several distinct wallets. Hence, distinguishing between retail and institutional holdings is inaccurate at best.

Popular outlets such as [bitcointreasuries.net](#) estimate the total number of Bitcoins held by public companies, private companies, governments, and other funds to be around 1.39 million BTC. Given the total number of Bitcoins mined, this would amount to a share of roughly 7.2%. Naturally, this is a rough estimate as there may be more Bitcoins in certain wallets belonging to institutional holders. Thus, these numbers may be seen as a lower bound for institutional holdings. Given that the numbers only refer to Bitcoin, holdings for the entire crypto sector might look differently.

Figure 7 Cryptocurrency Holdings



Source: Coingecko, Bitcointreasuries, Cointelegraph Research

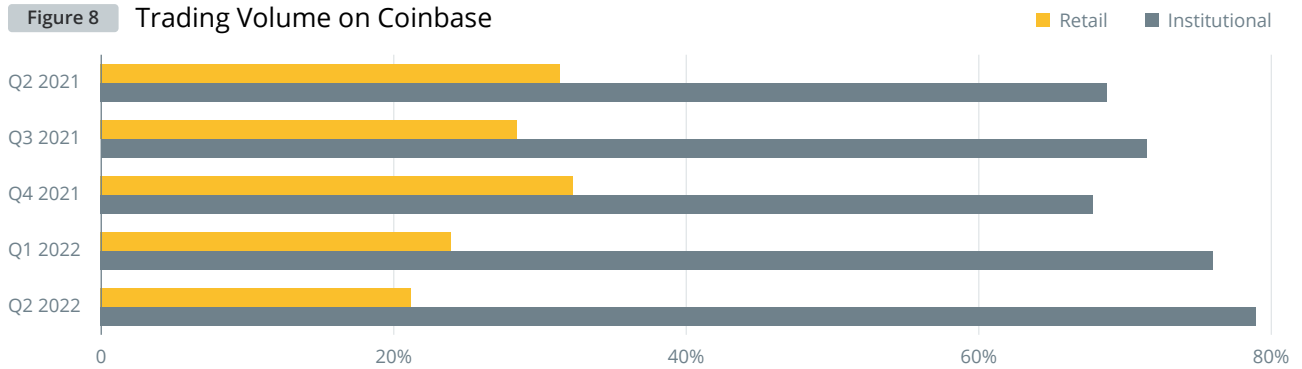
Institutions Account for 78.8% of Coinbase's Trading Volume

As most of on-chain trading is rather opaque due to the nature of crypto wallets, one has to refer to proxies to grasp the relevance of institutional investors. Coinbase for instance publishes trading volume for all assets traded on its platform by type of investor. Looking at the

share of trading volume, which stood at \$217 billion in Q2 2022, one can see that the share of trading volume associated with institutional investors has increased from 68.6% in Q2 2021 to 78.8% in Q2 2022. This is an increase of 10.2 percentage points in one year. Although this is just evidence from one of the largest exchanges, it might well be seen as exemplary for the whole sector.

¹³ See <https://www.cnbc.com/2020/05/11/paul-tudor-jones-calls-bitcoin-a-great-speculation-says-he-has-almost-2percent-of-his-assets-in-it.html>

Figure 8 Trading Volume on Coinbase



Source: Coinbase Shareholder Letter Q2 2022

Other sources, such as IntoTheBlock, also refer to the share of large transactions defined as transactions with a volume greater or equal \$100,000 as a proxy for institutional activity.¹⁴

Looking at these numbers, one can see that although large transactions make up less than 10% of total transactions, their volume accounts for up to 99% of total transaction volume.

Figure 9 Large Transactions in the Bitcoin Network

Large Transactions (Value of \$100,000 or Greater) as Share of Total Transactions Volume



Large Transactions (Value of \$100,000 or Greater) as Share of Total Transactions Count



Source: IntoTheBlock, Cointelegraph Research

1.5

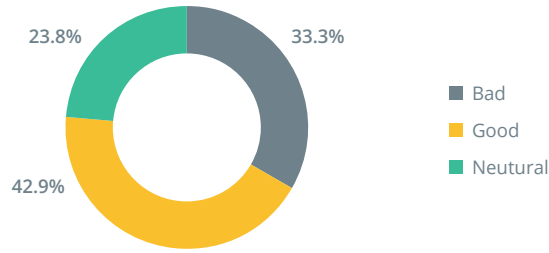
Perception of Cryptocurrencies

When asked about their perception of crypto assets, a strikingly large percentage of respondents reported a negative view. Unlike other asset classes, there appears

to be a strong anti-cryptocurrency strain held by some professional investors.

¹⁴ See <https://medium.com/intothelblock/cryptos-institutional-appeal-keeps-growing-1db522061912>

Figure 10 What Is Your Perception of Crypto Assets?



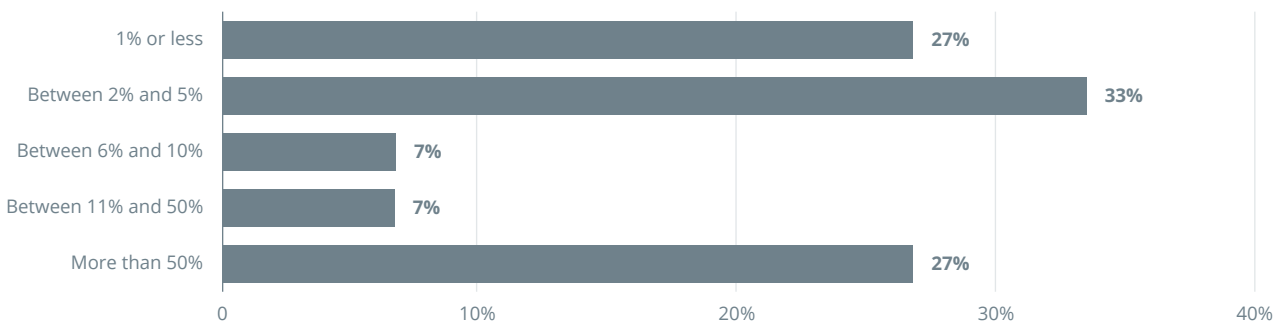
Source: Cointelegraph Research

Among the institutional investors who have had exposure to digital assets, **60% of the respondents have 5% or less of their assets under management**

in crypto assets. Notably, over a quarter of those surveyed have only 1% or less of their AUM in crypto assets.

3% Median percentage invested in cryptocurrencies by professional investor respondents

Figure 11 What Percentage of Your Company's Assets Are Invested in Crypto Assets?



Source: Cointelegraph Research



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Research

Cointelegraph Research provides bespoke research reports and white-label content for organizations in the cryptocurrency industry. If your organization has a specific research question, our industry experts can find the solution. Our team's multidisciplinary knowledge of the blockchain technology and traditional finance world enable us to solve complex challenges. We leverage primary data sources to bring you actionable insights within the digital asset space. We cover all the major sectors of the blockchain ecosystem, including layer-1 blockchains, Decentralized Finance (DeFi), mining, custody, non-fungible tokens (NFTs), private equity, and tokenomics.

Why Cointelegraph Research?



House of experts

Cointelegraph Research unites its cryptocurrency expertise with talent from across the fields of finance, economics and technology to bring premier industry analysis to the market.



Unparalleled approach

Cointelegraph Research's team strongly relies on a data-driven approach and trusted data sources. We uncover actionable opportunities for our clients by combining deep market structure analysis with years of consulting experience.



Proprietary Research Terminal

Cointelegraph Research Terminal is a convenient one-stop location to find free industry analysis as well as detail-focused premium content for those who seek knowledge on the current market trends, novel technologies and promising blockchains.



Tailor-made solutions

Cointelegraph Research's goal is to save you time. We will understand your unique business challenge and craft à la carte solutions to your questions.

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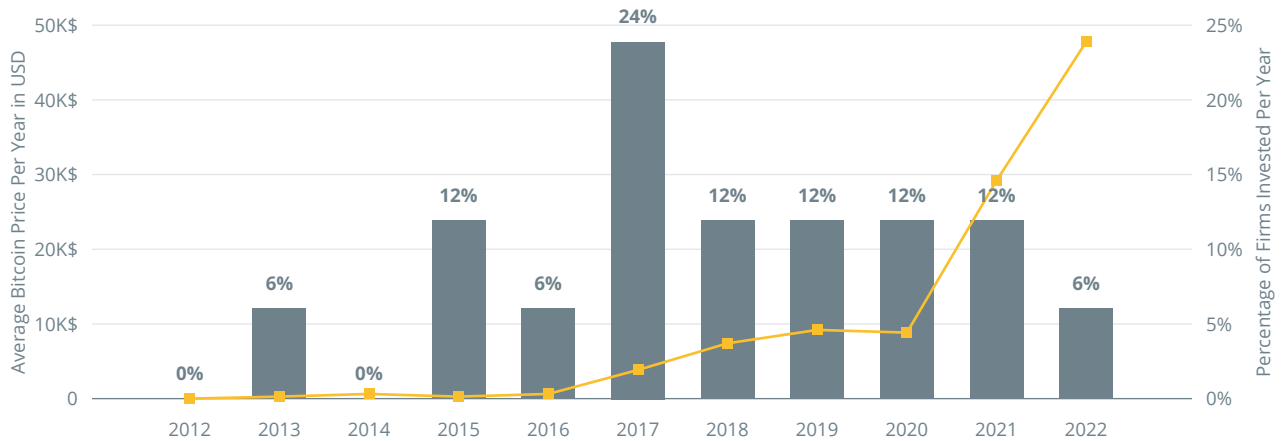
research@cointelegraph.com

When Did Institutional Investors First FOMO Into Cryptocurrencies?

Nearly a quarter of investors gained exposure to digital assets for the first time during the 2017 bull market. Only 6% of those surveyed invested in crypto assets in

2022 — after Bitcoin's all-time high on April 14, 2021, when the price was almost \$64,000 per coin and Bitcoin had a \$1.18-trillion market capitalization.

Figure 12 What Was the First Year Your Company Invested in Digital Assets?



Source: Cointelegraph Research

Main Reasons Why Institutions Are Buying Cryptocurrencies



Insider Insight

Why did you decide to allocate part of your family assets to cryptocurrencies?

First of all, a 2–3% allocation to Bitcoin in a standard 60/40 portfolio would have increased its Sharpe Ratio significantly. Secondly, cryptocurrencies are a unique diversification opportunity. And finally, every family should invest some of its assets in future technologies.

How do you allocate assets to crypto?

We weren't happy with the solutions on the market, as we were looking for active solutions managed by fund managers we trust and at a fair cost. So, we created our own actively managed certificate and hired Demelza Hays, an excellent crypto portfolio manager who we trust and has a fantastic track record. In addition, we needed a bankable product to ensure a scalable process across all our clients' portfolios.

What percentage of their portfolios should professional investors allocate to invest in crypto?

This really depends on the personal risk profile and the market outlook. Our peers usually allocate less than 1% or even 0% to the crypto market, while we recommend between 3% and 7% depending on multiple factors. We currently view cryptocurrencies as neutral, but increasingly bullish. We are, therefore, allocating 5%.



Thomas Zeltner,
CEO Zeltner & Co

Zeltner & Co



How does your crypto portfolio management work?

Our performance is a combination of cryptocurrency exposure, staking rewards and premium generation from market-neutral derivative strategies. We follow a core-satellite approach where we invest in large coins, like Bitcoin or Ether, as our core and various smaller altcoins as our satellite. In addition, we apply an actively managed rebalancing strategy that has been designed to exploit cryptocurrency volatility while reducing risk and maximizing the long-term upside.



Kim Wirth,
CIO Zeltner & Co



What coins are you investing in?

We currently diversify across three categories. Layer-1 and layer-2 coins as well as exchange cryptocurrencies. We also trade derivatives to implement certain strategies, such as hedges.

How do you manage the risks of crypto exposure from a portfolio point of view?

To start with, the crypto product itself can go market neutral or even short if we are bearish. In addition, we optimize our tactical weights for the crypto exposure to manage our overall portfolio volatility. In addition to this, rebalancing is still one of the most powerful tools when used correctly.

How does your cryptocurrency research work?

We have a bottom-up approach, which we use to generate a pool of coins and projects which are reliable and promising from our point of view. We then track these coins by using quantitative signals to decide when to buy and when to sell. On top of this pool and these signals, we draw a macroeconomic picture of the world to decide whether we are bullish or bearish on the overall crypto market. This is where we decide what percentage we will allocate within the predefined pool of coins and how much we will invest in the market-neutral strategies consisting of futures and options.

According to the survey results, the most important consideration for investing in digital assets is their risk-return ratio as 44% of respondents rated this characteristic as “highly important.” Most of the responses to “diversification” and “my company is convinced that the technology will be important in the

future” are clustered in the middle and slightly skewed to the right of the importance spectrum, meaning that these factors are moderately important. Notably, the survey shows that clients requesting digital assets are not very relevant to the asset managers’ decision to invest in these assets.

Figure 13 Risk-return ratio

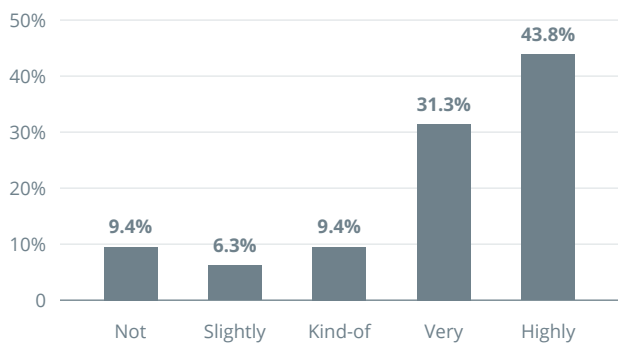
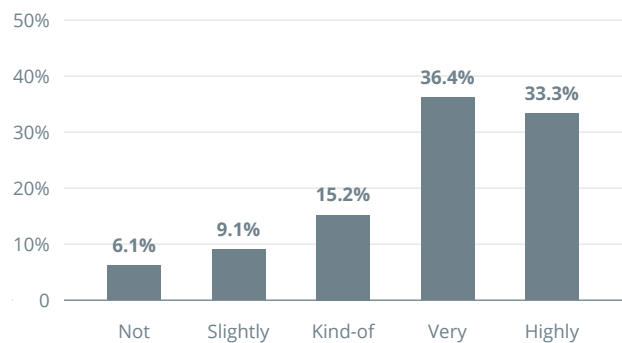


Figure 14 Diversification



Source: Cointelegraph Research

Figure 15 My company is convinced that the technology will be important in the future Assets

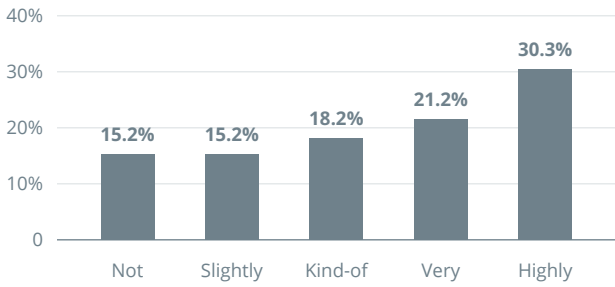
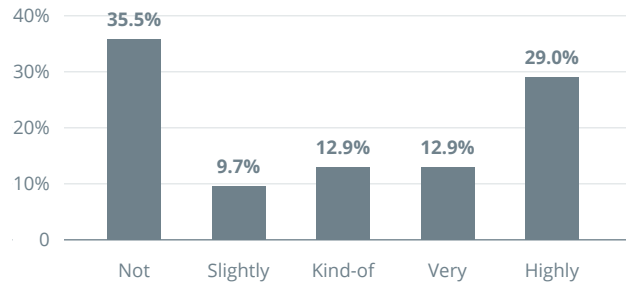


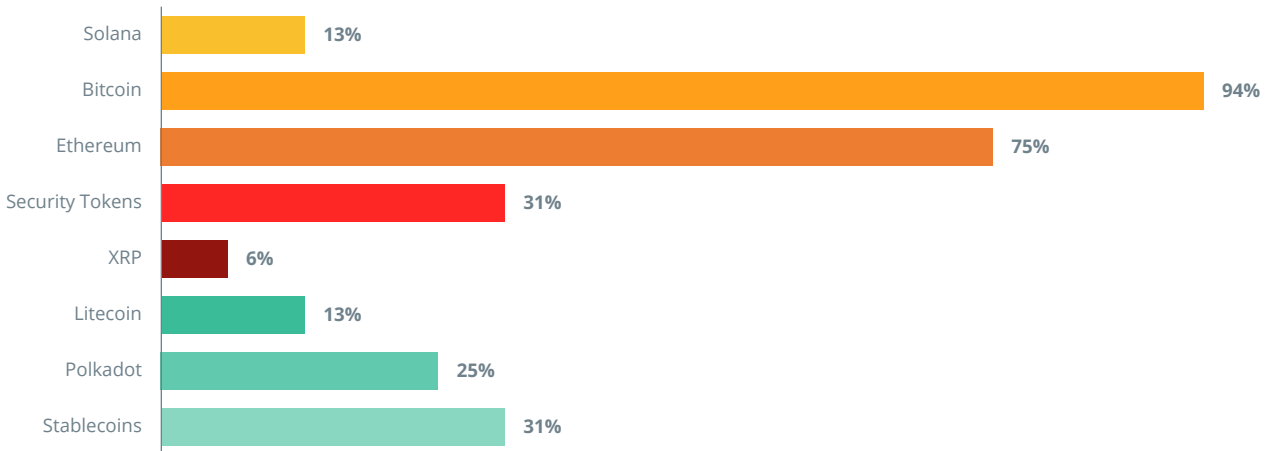
Figure 16 My clients ask for exposure to Crypto-Assets



Source: Cointelegraph Research

1.8 Top Cryptocurrencies Held by Professionals

Figure 17 Which Types of Digital Assets Has Your Company Invested in?



Source: Cointelegraph Research

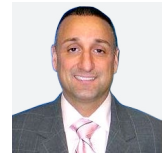
Bitcoin and Ether

It should come as no surprise that professional investors are primarily holding Bitcoin (94%) and Ether (75%). In addition to the two top digital assets when measured by market capitalization, institutions are

also interested in security tokens (31%) and stablecoins (31%). Smaller holdings included Polkadot (DOT) (25%), Solana (SOL) (13%) and Litecoin (LTC) (13%). Several investors mentioned they are also interested in publicly traded blockchain stocks.



What does the due-diligence process for different tokens look like, and how do you ensure institutions your process is secure?



John Mannino,
CCO of sFOX

Many organizations have some sort of test, but there is no standard.

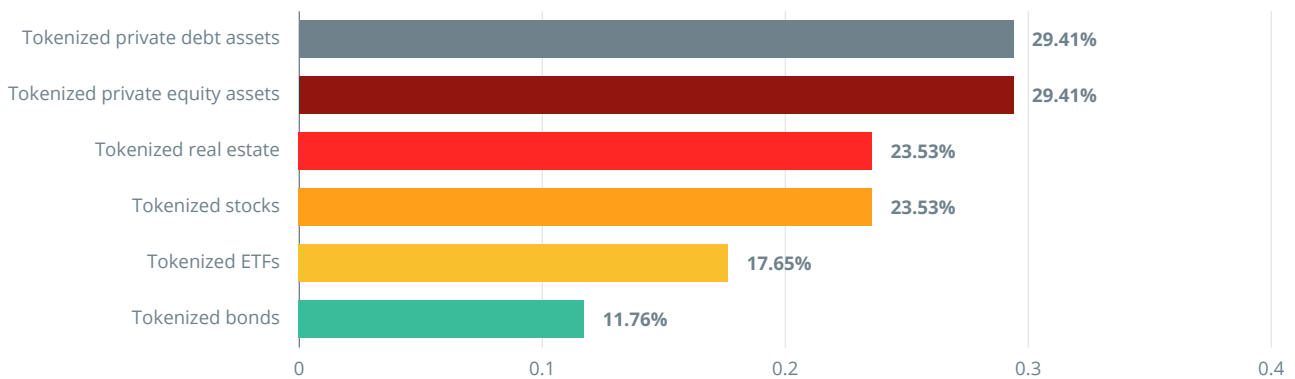
At sFOX, we bring deep TradFi experience to help understand the ins and outs of regulation. We've done the legwork and the due diligence by looking at the underlying technology of new tokens from an operational, technical and security perspective before reviewing from a compliance perspective. This thorough internal review process helps enable institutions to trade in a complete and compliant manner. Our process ensures these institutional investors that we can take the "gamble" out of crypto.

Our business model and process for reviewing the addition of tokens has proven successful, as it lessened the effects of the recent crypto winter on our clients and our business. When other platforms were pausing withdrawals or redemptions, we were set up to handle any mass liquidation events. We also made it a priority to reach out to our clients to see how we could help execute strategies, especially if they had been affected on other trading platforms.

John Mannino is currently the chief compliance officer of sFOX. He joined sFOX after more than two decades of extensive operations and regulatory compliance experience at Goldman Sachs, where his last position was senior vice president, global head regulation assurance and compliance. He has worked at Goldman Sachs offices in New York City, Los Angeles, Zurich and London where he oversaw daily compliance across multiple regulators in the OTC derivative margin and collateral sectors while also continuing to navigate the rapidly changing derivative regulatory environment as it emerged globally. John also served as a finance and risk compliance manager at Accenture, where he helped financial institutions manage and transition product suites that could be potentially impacted by compliance and regulatory changes.

Tokenized Securities

Figure 18



Source: Cointelegraph Research

A Single NFT Sold for \$69 million

When Visa bought a CryptoPunk NFT in August 2021,¹⁵ the purchase created a lot of waves. The company stated that it saw NFTs as a "promising medium for fan engagement."¹⁶

Top-tier auction houses Sotheby's and Christie's featured eight-figure NFT auctions as the market for natively digital art with blockchain-proofed ownership heated in the summer of 2021. Sotheby's natively digital auction line¹⁷ featured NFTs from Pak, LarvaLabs and Xcopy, while Christie's sold Beeple's "Everydays: The First

¹⁵ See Cointelegraph: [Visa invests \\$150,000 in NFT CryptoPunk asset](#)

¹⁶ See Cointelegraph: [Visa describes NFTs as a 'promising medium for fan engagement'](#)

¹⁷ See Sotheby's: <https://www.sothebys.com/en/buy/auction/2021/natively-digital-a-curated-nft-sale-2>

5000 Days"¹⁸ for \$69 million and curated its "Encrypted" digital art series.

But not all institutions are bullish on NFTs. When ConstitutionDAO, an ad-hoc group of private investors, tried to purchase an original copy of the United States constitution, it was outbid by hedge fund titan Kenneth Griffin. ConstitutionDAO raised \$47 million from private investors at an average contribution of just \$217.¹⁹ But the transparent nature of its efforts meant that other bidders knew exactly how high it could bid.














We see future NFT demand by institutional investors to fall into two categories:

1. Acquisition of "blue-chip" NFT projects, similar to Visa's purchase of a CryptoPunk.
2. NFTs as certificates of ownership of other underlying assets.

Number two has been spearheaded by Uniswap, where a user receives an NFT representing their liquidity position. Since some liquidity providers can be extremely profitable, these "utility NFTs" can represent ownership of a yield-bearing asset.

Overall, the interest and sentiment of institutional investors for NFTs is positive. However, without a solid regulatory framework and likely without deeper liquidity and more sophisticated instruments, institutions will not invest heavily in NFTs.

Figure 19

	Title	Secondary Transactions	Secondary Volume	Primary Sales Revenue	Total Royalties	Total NFT Revenue
	Nike	67.50k	\$1,290M	\$93.10M	\$92.23M	\$185.34M
	Dolce & Gabbana	9.15k	\$20.19M	\$23.14M	\$2.52M	\$25.65M
	Tiffany	74.00k	\$3.40M	\$12.62M	0.00	\$12.62M
	Gucci	4.05k	\$31.14M	\$10.00M	\$1.56M	\$11.56M
	Adidas	51.60k	\$175.74M	\$6.20M	\$4.75M	\$10.95M
	Time Magazine	21.43k	\$37.47M	\$7.09M	\$3.71M	\$10.80M
	Budweiser	4.13k	\$6.57M	\$5.88M	0.00	\$5.88M
	Bud Light	10.52k	\$3.32M	\$4.00M	0.00	\$4.00M
	AO	9.62k	\$8.06M	\$1.50M	\$0.20M	\$1.70M
	Lacoste	11.67k	\$2.63M	\$1.00M	\$0.11M	\$1.11M
	Nickelodeon	7.36k	\$2.62M	\$0.32M	\$0.26M	\$0.58M
	McLaren	2.05k	\$2.58M	\$0.20M	\$0.13M	\$0.33M
	Pepsi Mic Drop	3.39k	\$11.03M	0.00	0.00	0.00

Source: [Dune Analytics](#)

¹⁸ See Christie's: <https://www.christies.com/features/monumental-collage-by-beeple-is-first-purely-digital-artwork-nft-to-come-to-auction>

¹⁹ See Cointelegraph: [ConstitutionDAO fails to win Sotheby's auction](#)



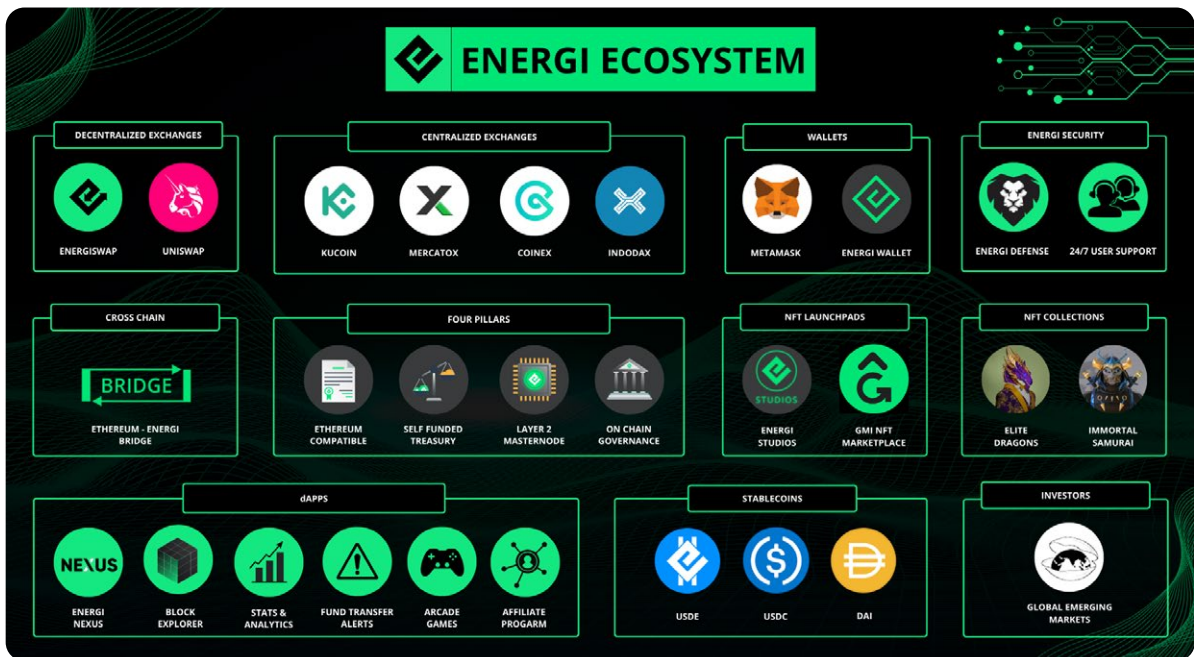
NFTs have taken the crypto market by storm due to their potential to disrupt industries and reimagine what was previously conceivable with art and commerce.

However, as with all disruptive technologies, the increase in institutional demand not only comes with growth in the amount of capital deployed but also the potential rise of crime and theft.

The Gonnmakeit NFT marketplace is set to address these risks to become a user-centric platform where NFT artists, traders and enthusiasts can transact with peace of mind, knowing that their assets and data will benefit from the highest level of safety. This in turn will enhance trust in the NFT space and build a solid foundation for mass adoption for years to come.



Tommy WorldPower, CEO and founder of Energi and Gonnmakeit



Initially scheduled to launch on Ethereum, the Gonnmakeit marketplace will inevitably move to the Energi blockchain where we have virtually stopped all cybercrime and scamming activities.

Beyond the security aspect, Gonnmakeit will offer strong incentive rewards for users to claim, stake and trade the native GMI token.

Metaverses Attract \$120 Billion

According to a recent McKinsey survey of 3400 consumers and executives, \$120 billion has already been invested in the Metaverse by Corporations, VC, and PE in 2022, more than double the \$57 billion invested in all of 2021.²⁰ A large part of it is driven by

Microsoft's planned acquisition of Activision for \$69 billion. The study also found that 95% of business leaders expect the metaverse to have a positive impact on their industry within five to ten years, and 61% expect it to moderately change the way their industry operates.

²⁰ <https://www.mckinsey.com/~media/mckinsey/business%20functions/marketing%20and%20sales/our%20insights/value%20creation%20in%20the%20metaverse/Value-creation-in-the-metaverse.pdf>

Consumers and brands are already engaging

59% of consumers are excited about transitioning their everyday activities to the metaverse

57% of metaverse-aware companies say they are adopters

Top 5 activities consumers are excited about

- Social
- Entertainment
- Gaming
- Travel
- Shopping



Top 5 enterprise use cases companies are implementing

- Marketing campaign or initiatives
- Learning and development for employees
- Meetings in the metaverse
- Events or conferences
- Product design or digital twinning

Source: McKinsey

McKinsey estimates Metaverse to have a market impact of \$5 trillion by 2030:

- Between \$2 trillion and \$2.6 trillion on e-commerce
- \$180 billion to \$270 billion on the academic virtual learning market
- \$144 billion to \$206 billion impact on the advertising market
- \$108 billion to \$125 billion impact on the gaming market

The main reason that NFTs and Metaverses are important for institutional investors, is that consumer-led marketing is a growing and powerful method for reaching customers. Brands and projects that activate consumer-led and personalized marketing will have more engagement and higher conversion rates. Since these assets are on the blockchain, investors can earn real ROI by understanding which NFTs and Metaverses will go viral.

Zeltner & Co

The Investment Boutique and Family Office
for professional investors with a 40-year legacy.

CONTACT US AT INFO@ZELTNERCO.COM TO SET UP A DISCOVERY CALL. WE CAN SEND YOU A COMPLIMENTARY METAL LOOKBOOK.

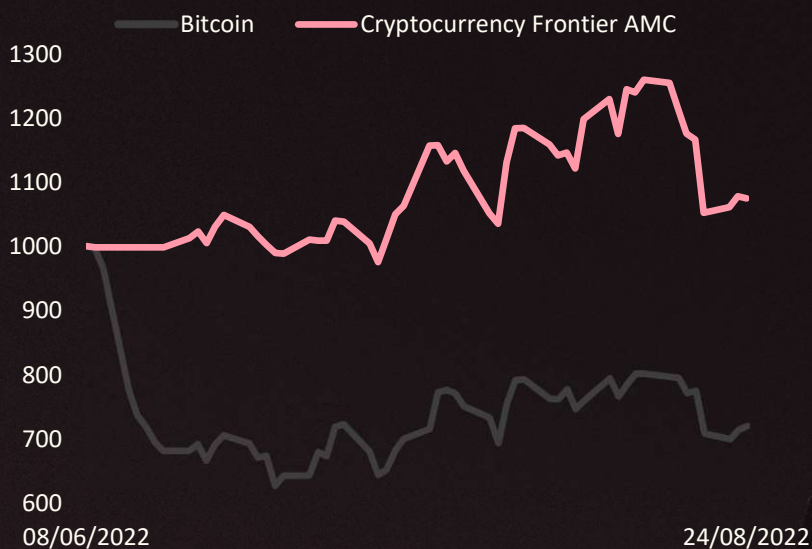
Zeltner & Co offers single, unique products covering a range of asset classes.

Examples include physically stored metals, cryptocurrencies, private lending solutions and high-conviction individual stock selections. With its family office set-up, Zeltner & Co also offers wealth management solutions.

What we do in Crypto

To diversify our client's wealth we have built our own actively managed crypto certificate: the **Cryptocurrency Frontier AMC**.

This certificate has a Swiss ISIN number and is easy to book at your custodian bank – this means that it is bankable. With the various alternative coins, in which the AMC has investments, there is potential profit from a great investment universe. In addition, market neutral strategies are used in our certificate in bear markets.



Crypto Funds, Corporate Finance & Derivatives

This section focuses on the different ways that professional investors are gaining exposure to distributed ledger technology. The four key ways include directly holding cryptocurrencies, buying crypto funds, mergers and acquisitions (M&As) and derivatives.

There are many regulated investment products that give investors exposure to digital assets, including long-only

single-asset or index products, derivative products, bank accounts for proprietary desk trading and much more. The survey results show that a slim majority of investors (55%) prefer to hold cryptocurrencies directly. Interestingly, professional investors prefer to buy a regulated alternative investment fund before buying structured products or trading futures. Active strategies beat out passive strategies by a narrow margin.

Figure 20 What would be your company's ideal way to gain exposure to crypto assets?

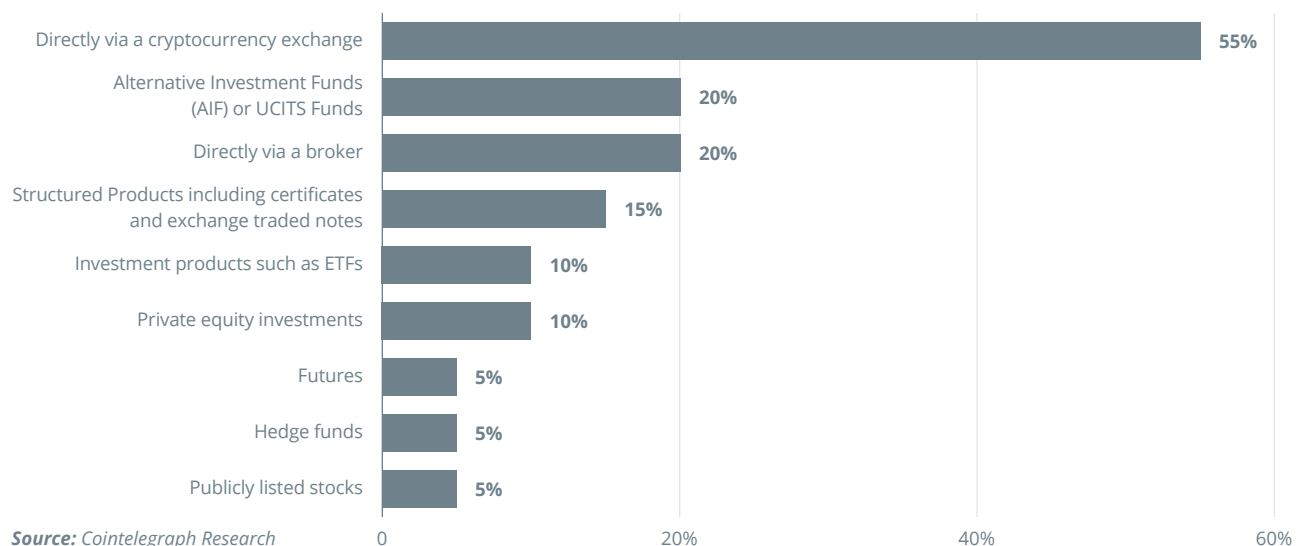
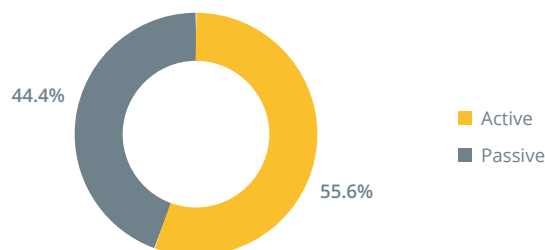


Figure 21 Do you prefer crypto investment products with passive or active management?



**What is your position on digital assets?**

Digital Assets are one of our strategic focus fields because we believe in the fundamental technology behind it and see a potential for many future use cases.

Cryptocurrencies, which we subsume under digital assets, are currently the one digital asset with the highest market readiness. For us, the growing institutionalization over the last 18–24 months has helped to grow and mature this market in a way that cryptocurrencies are the fifth asset class and are here to stay. On the other hand, we register an increasing demand from our customers regarding services and products centered around digital assets and in particular cryptocurrencies. Our customers wish to handle their cryptocurrencies business where they handle the rest of their financial business: with us as their main house bank. We believe that a substantial part of exchange services derive from necessity, as most traditional banks still don't offer crypto services. We want to change that. Hence, it is our job to establish a safe and easy way for our customers to access this market.



Dr. Alexander Thoma,
head of digital
assets at

**Do you currently offer blockchain or cryptocurrency products or services, or are you planning to do so in the future?**

Currently, we don't offer direct investments into cryptocurrencies. We are, however, developing products and digital asset services. We look forward to updating the media as soon as we have more news to share.

PostFinance is one of Switzerland's leading financial institutions, with around 2.7 million customers. Continuing to shape the Swiss financial market with innovation-driven services is one of PostFinance's main objectives for the future.

2.1

Inflows to Cryptocurrency Funds

On-chain data cannot tell us whether an address represents an institution or an individual. Services like Glassnode and Nansen employ data scientists to perform more sophisticated entity resolution, but even there, the aggregated data for institutional demand is not available.

Most institutional demand is centered on the major cryptocurrencies because they offer the most liquidity in spot and derivatives markets. While it is not easy to separate retail from institutional interest by transaction data alone, we have identified **three** valuable indicators to do just that: inflows into funds, annual financial

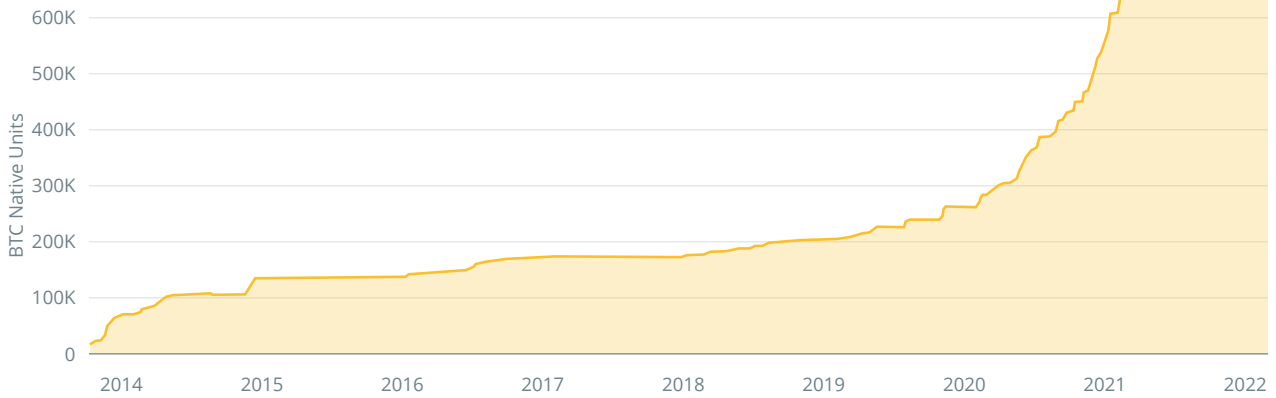
disclosure filings with regulators, and merger and acquisition deals. Let's take a closer look.

Bitcoin and Ether command the lion's share of institutional interest. Deep spot, futures and options liquidity combined with offerings by trusts like the Grayscale Bitcoin Trust make these cryptocurrencies especially attractive.

Security is one of the major concerns institutional investors want to have addressed, and trusts offer a very convenient and cost-effective solution. **Inflows into funds are one way to gauge institutional interest in digital currencies.**

Figure 22 Bitcoin holdings in Grayscale's Bitcoin Trust

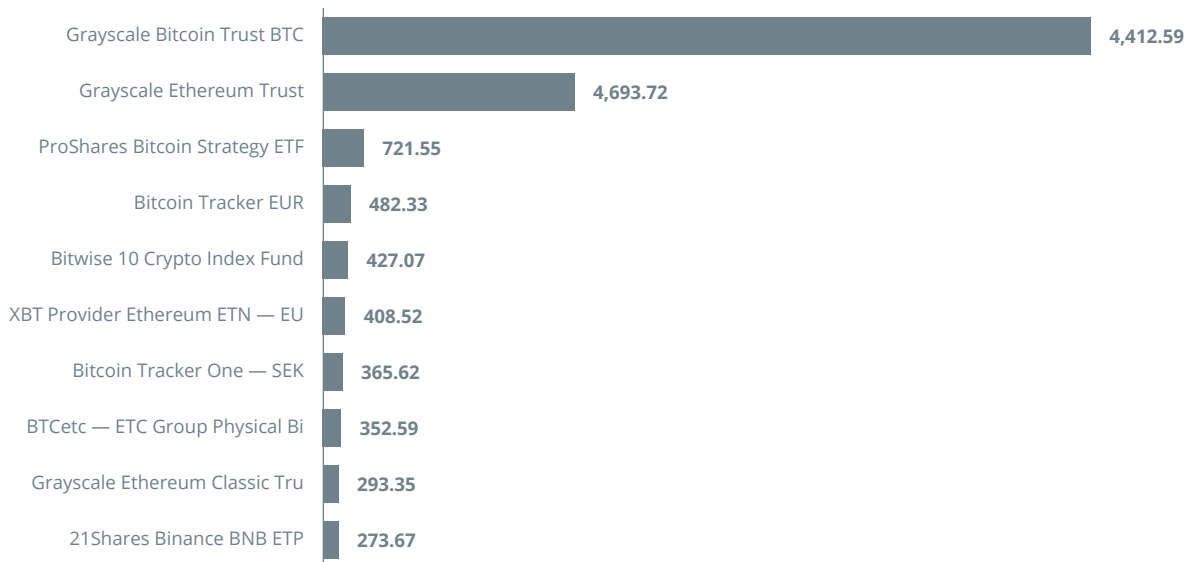
Source: CoinMetrics



Grayscale alone holds more than 640,000 BTC, worth \$13.6 billion at the time of this writing. The visible plateau in GBTC holdings may be due to increased competition from Bitcoin Futures ETFs, such as

ProShares' Bitcoin Strategy ETF (BITO) (\$721 million AUM) and Bitwise's 10 Crypto Index Fund (\$427 million AUM), as well as a general slowdown in institutional uptake of Bitcoin during the 2022 bear market in Bitcoin's price.

Figure 23 Top 10 Cryptocurrency Funds by Assets Under Management



Source: Bloomberg Terminal

Yearly inflows into cryptocurrency trusts were \$9.3 billion in 2021, up 36% from the \$6.3 billion in 2020, but this represents a sharp slowdown from the 806% growth in inflows from 2019 to 2020. The market is maturing, and investors should not expect similar gains soon.²¹ We have seen time and again that the most explosive potential for upside is in the early stages of digital assets. Bitcoin is now almost a trillion-dollar

asset, a mark it has cracked within the last year. In 2013, Bitcoin's market cap was shy of \$1.5 billion, meaning it had multiplied more than 800x at its all-time high in November 2021. It is hard to believe that Bitcoin is able to reach a market capitalization of more than \$700 trillion. However, surpassing gold's \$10-trillion market capitalization is within reach with reasonable assumptions

²¹ See CoinShares: Digital Asset Fund Flows Annual Summary, January 2022



I could see cryptocurrency having a big role in a Renaissance because people just aren't going to trust the central banks.²²

Stanley Druckenmiller, CEO of Duquesne Family Office | AUM \$12 Billion



DUQUESNE

Digital Asset Fund Performance YTD

The last 12 months have been a massive destruction of the value in digital assets. The total circulating market capitalization of cryptocurrencies has dropped from

\$2.72 trillion on Nov. 11, 2021, to \$795 billion on June 18, 2022, eradicating 71% of total dollar-denominated value, or \$1.92 trillion.

Figure 24 Total Circulating Market Capitalization of all Cryptocurrencies



Source: CoinMarketCap

Digital asset fund performance reflects this dynamic accurately, as can be expected. Ecosystem-specific funds like the VanEck Avalanche ETN, or the 21 Shares Solana Staking ETP fell in tandem with the underlying cryptocurrencies, while short-selling strategies such as Betapro's Inverse Bitcoin ETF gained.

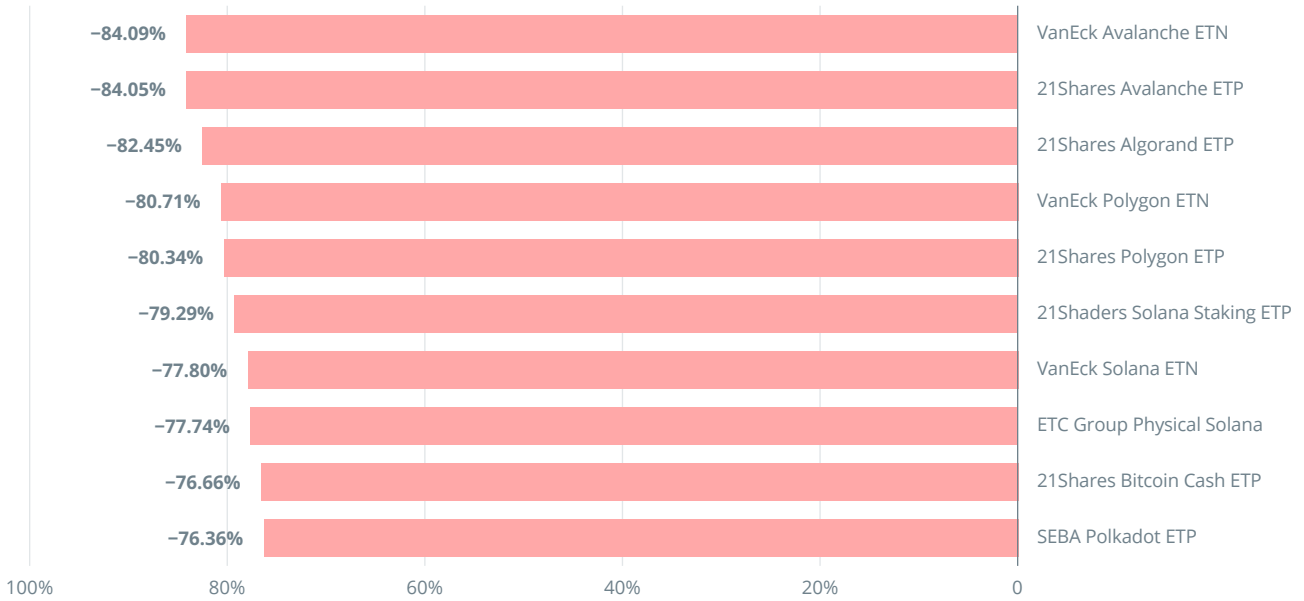
More diversified crypto funds with active management²³ did far better. Purpose's Crypto Opportunities ETF outperformed the best passive cryptocurrency ETF and lost "just" 33.5% instead of VanEck's Bitcoin ETN, which lost almost 53% of its value.

The largest fund by volume is still Grayscale's Bitcoin Trust Fund, with \$14 billion in AUM.

²² See <https://www.cnbc.com/2022/09/28/cnbc-transcript-duquesne-family-office-chairman-ceo-stanley-druckenmiller-speaks-with-cnbc-joe-kerren-live-during-the-cnbc-delivering-alpha-conference-today.html>

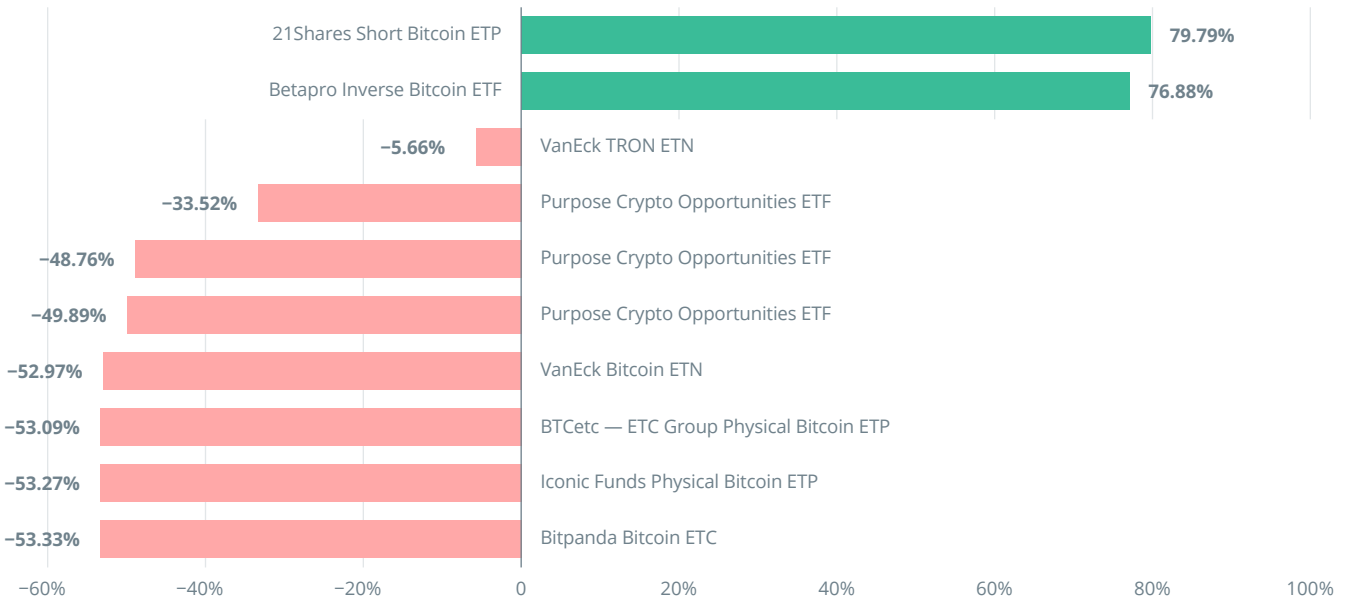
²³ See the brochure from Purpose Crypto [here](#)

Figure 25 YTD Worst Performers



Source: Bloomberg Terminal

Figure 26 YTD Best Performers



Source: Bloomberg Terminal

Financial Disclosure of Cryptocurrency Holdings

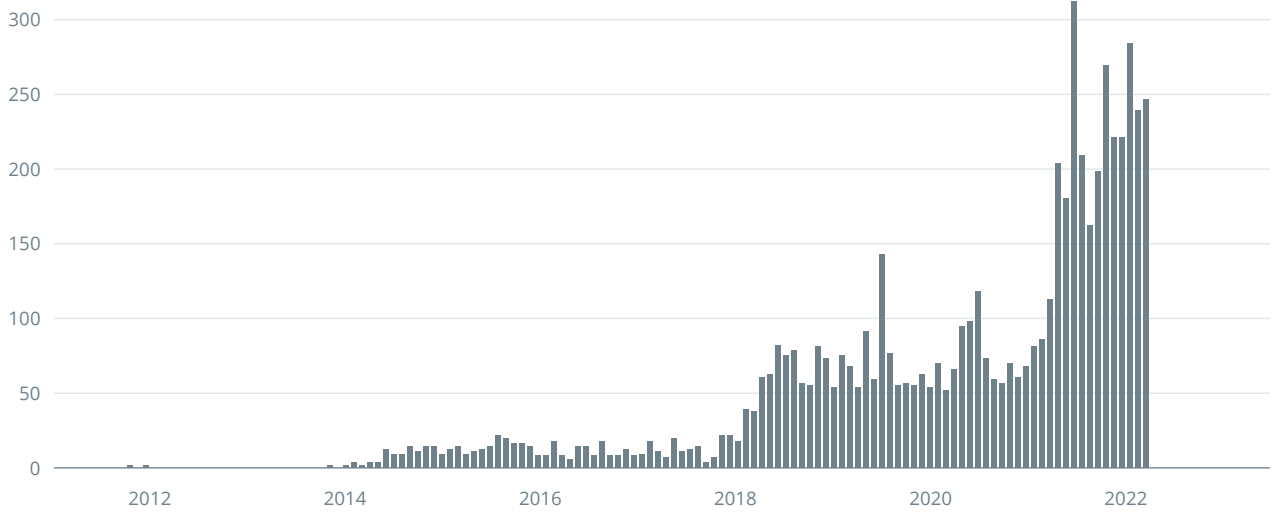
Another way to gauge institutional interest is to check Form 13F filings. An institutional investment manager who has investment discretion of \$100 million or more must report holdings quarterly on Form 13F with the United States Securities and Exchange Commission. Only a subset of a fund's investments need to be reported, and any positions in spot BTC do not need to

be filed. However, crypto-related investment vehicles, such as trusts, are often disclosed in Form 13F.

Coin Metrics parsed the SEC's EDGAR database via a full-text search for "bitcoin" and "ethereum" and then deleted double counts when the same entity reported holdings in subsequent filings. These clearly show a threefold increase in Bitcoin-related filings from 2020 and a fourfold increase for Ether.²⁴

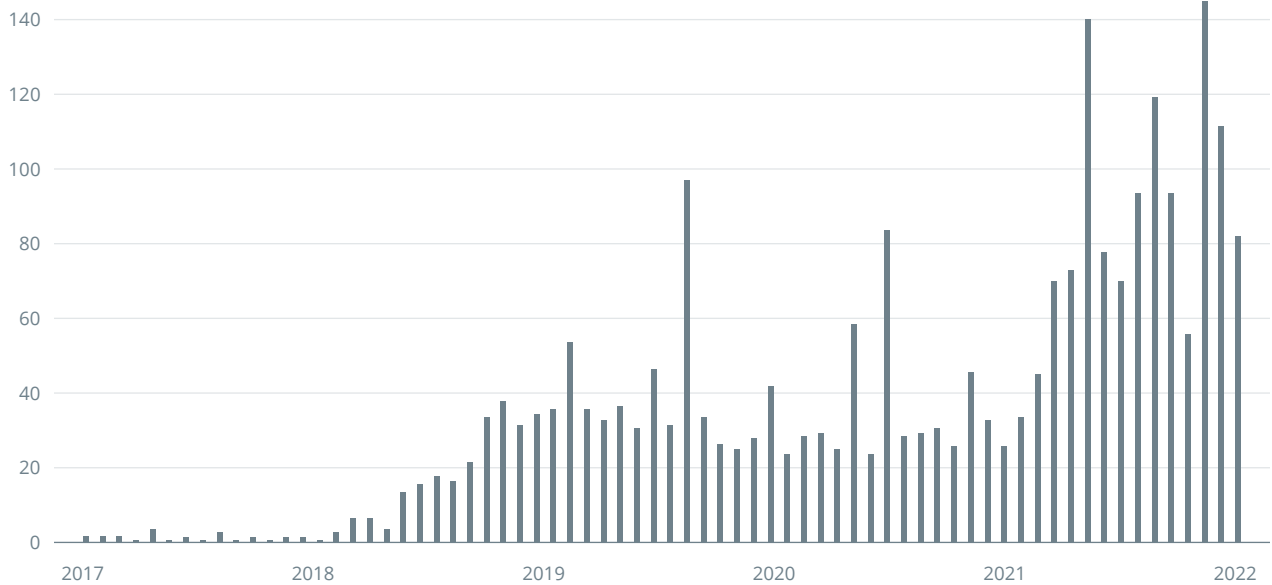
²⁴ See CoinMetrics: [Searching Millions of SEC Filings for Crypto-Related Terms](#)

Figure 27 Number of Unique Entities Mentioning "Bitcoin" in SEC filings, Monthly



Source: Coin Metrics, U.S. SEC's EDGAR

Figure 28 Number of Unique Entities Mentioning "Ethereum" in SEC Filings, Monthly



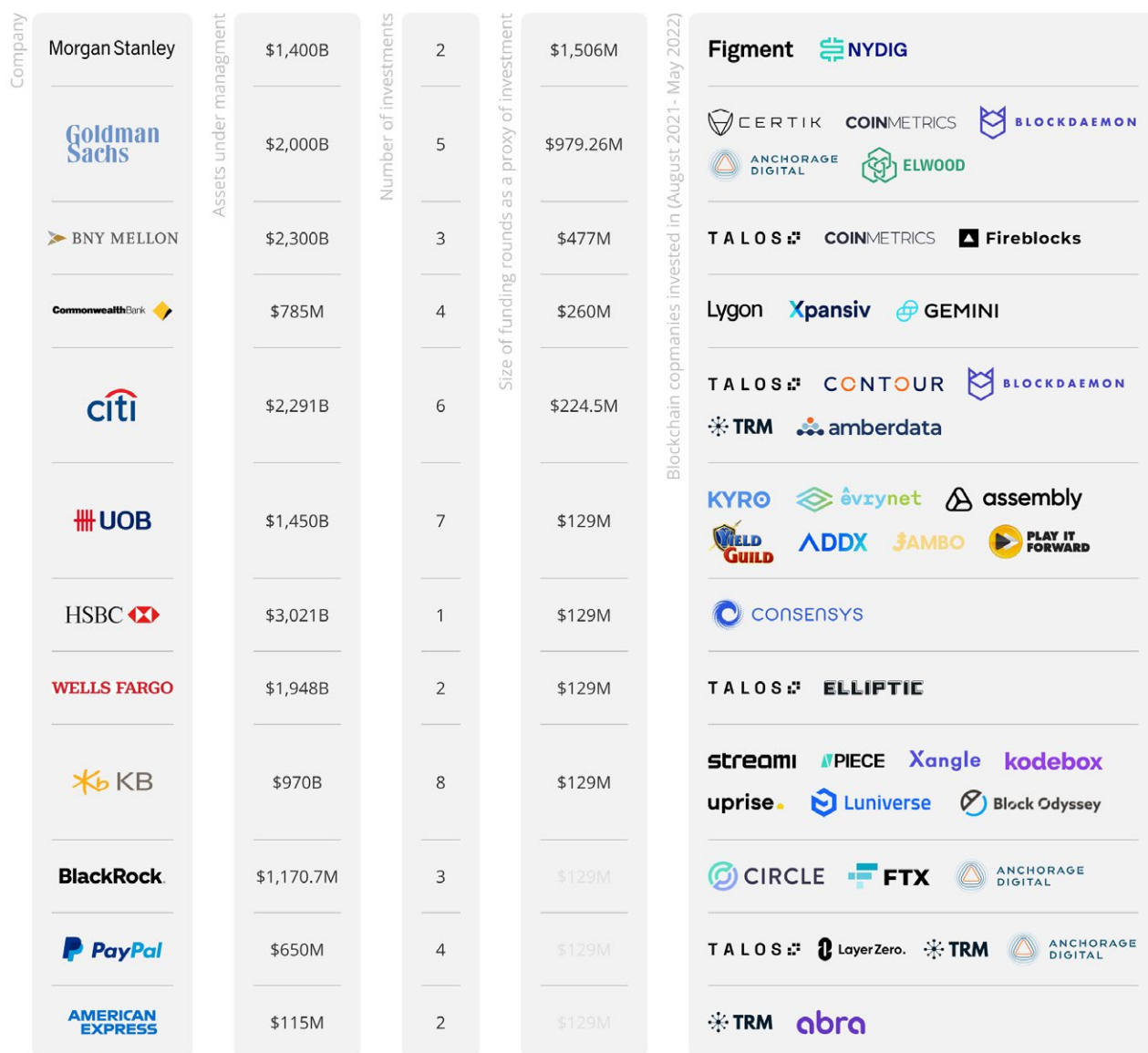
Source: Coin Metrics, U.S. SEC's EDGAR

TradFi M&A With Crypto

Apart from directly purchasing digital assets, institutional investors can gain exposure to this market by investing in blockchain companies via the traditional routes of seed, VC, growth state private equity or mergers and acquisitions. The advantage of investing in

a blockchain company is that the legal, accounting and tax implications are well understood in comparison to the mirky gray area associated with directly purchasing cryptocurrencies.

Figure 29 Top Banks, Asset Managers and Payment Companies Investing in Crypto and Blockchain Companies

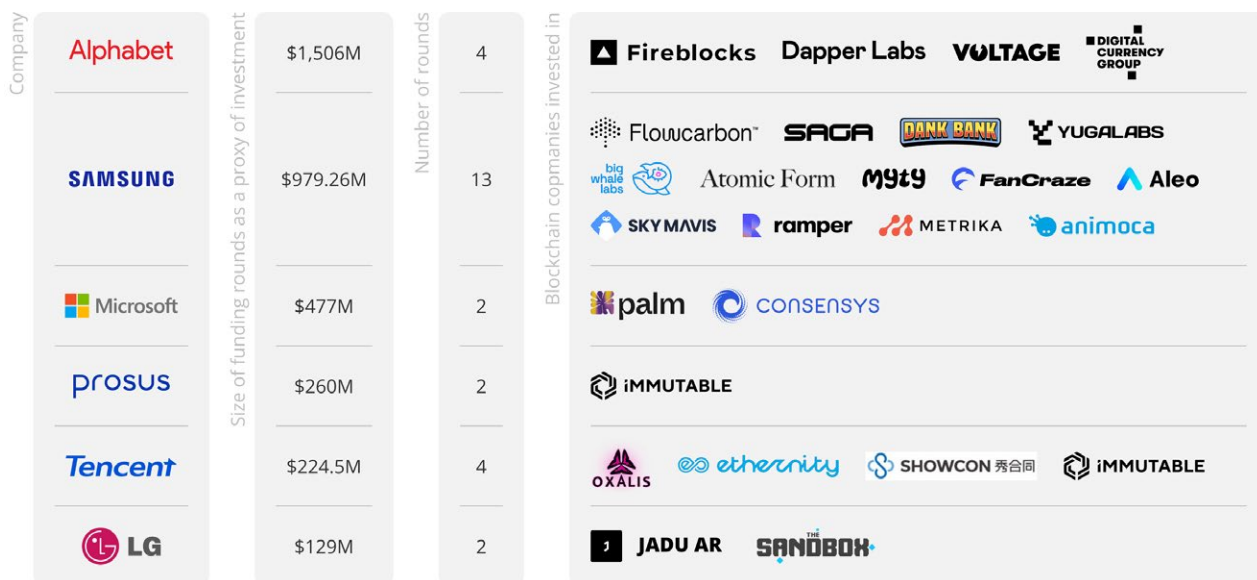


Source: Cointelegraph Research, Twitter @TokenDamo

We can see that many major banks have invested in either blockchain infrastructure companies, such as Fireblocks, cryptocurrency exchanges, such as Gemini, or analytics companies, such as Amberdata. The trend is

clear in what types of companies are being invested in — compliance, custodial, and infrastructure. The trend is clear in what types of companies are being invested in - compliance, custodial, and infrastructure.

Figure 30 Top Public Companies Investing in Crypto and Blockchain Companies



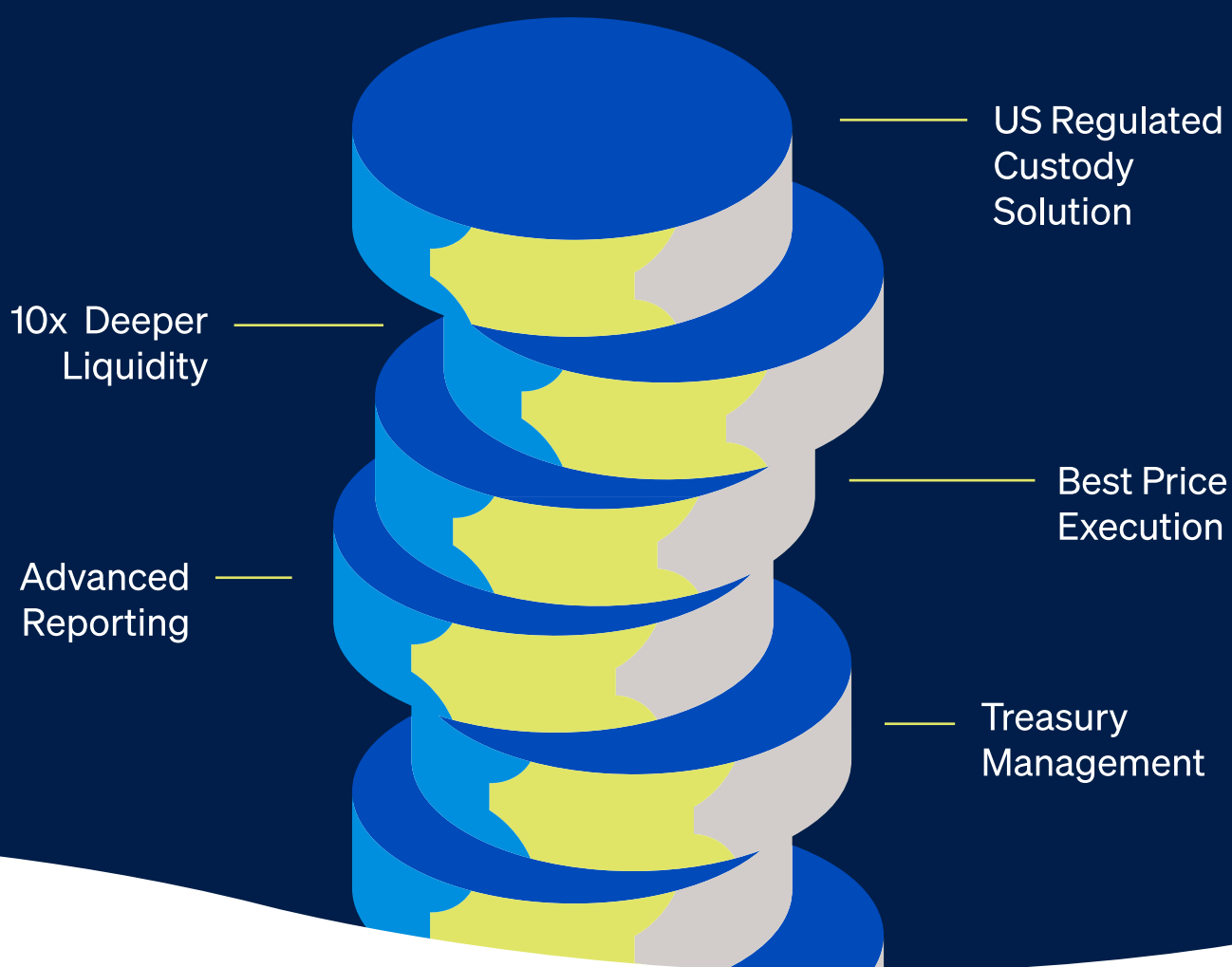
Source: Cointelegraph Research, Blockdata

In addition to banks, global technology giants are also investing in blockchain and crypto companies. The most active investors include household names such as Samsung, PayPal and Google’s parent company, Alphabet.

Apart from blockchain developer companies, such as Layer Zero, Immutable and Talos, digital asset custodians, such as Fireblocks or Anchorage, were popular choices, as were GameFi powerhouses like The Sandbox and Dank Bank.

Scale your Crypto Advantage

sFOX provides you with the access and technology that institutions need to stay competitive.



The ultimate partner for institutional crypto.

Learn more at www.sFOX.com/ct



Derivatives

The increasing participation of institutional investors and the growth of the crypto derivatives market are mutually reinforcing and indicate maturation. Derivatives are an important building block for efficient market participation and are of particular importance to institutional investors.

Derivatives offer a more liquid trading instrument that frequently allows positions with up to 100x or even more in leverage. Together with sophisticated take-profit and stop-loss parameters, they allow traders a much more granular expression of their positions compared to spot markets. Liquidity in derivatives is five to 10 times that of spot markets on any given day, depending on what type of derivative and what type of digital asset is considered, according to The Block.

Digital asset derivatives come in the form of futures and options, for the most part. More advanced constructs have included non-deliverable forwards, which is a money market instrument. Some crypto native

derivatives have also been developed. Squeeth is one such example and offers perpetual swaps following the price of ETH squared. We will discuss futures and options here.

Digital asset derivatives have some notable differences from their traditional counterparts. One main difference is market opening times. The Chicago Mercantile Exchange (CME) closes on weekends and for a quarter hour every day,²⁵ whereas crypto exchanges like FTX offer derivatives trading 24/7. The CME also issues futures on Bitcoin, which are available for trading only during market opening times.

Since crypto exchanges like Binance and FTX are not subject to the same level of regulatory scrutiny as the CME and other traditional issuers of financial instruments, the exact legal underpinnings of digital asset derivatives are somewhat vague until regulators close the gap.



We are working on something larger than ourselves, [sound money for all of humanity](#).²⁶

Ross Stevens, CEO of Stone Ridge Asset Management | AUM \$10 Billion



STONE
RIDGE | Asset
Management

Futures

Digital asset futures are almost exclusively perpetual swaps (mostly called perpetuals or just “perps”), which means they are never settled.

Open interest is a great measure of future liquidity. Open interest measures the value of active futures

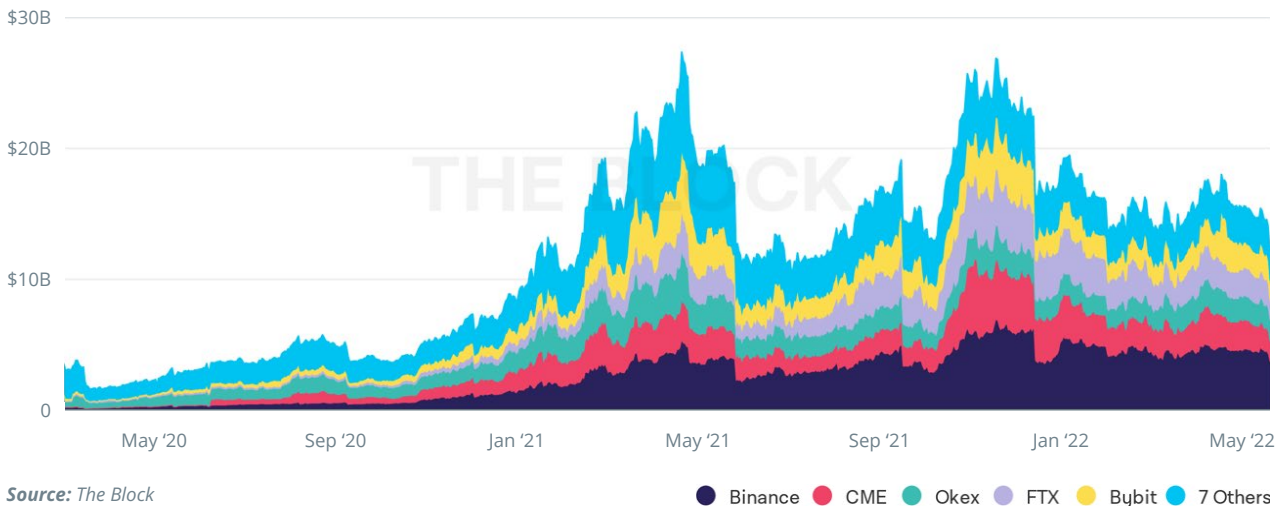
positions held. It increases when more contracts are opened than closed on a specific day. Looking at the development of open interest shows peaks during bull markets in the spring and winter of 2021. The overall level has increased by about 30% in 2022 compared to last year and by more than five times from 2021 to the year before.²⁷

²⁵ See CME: CME Group Trading Hours — CME Group

²⁶ See <https://twitter.com/documentingbtc/status/1395794675034992654?lang=es>

²⁷ See The Block: State of the Market April 2022 — Crypto Derivatives

Figure 31 Open Interest of Bitcoin Futures



Source: The Block

Comparing the liquidity of futures to the spot market reveals why derivatives are so attractive to professional traders. Spot markets offer a fifth to an eighth of the

liquidity of derivatives markets for Bitcoin and a quarter to a fifth for Ether.

Figure 32 Bitcoin Spot to Futures Volume



Source: The Block

The volume of traded Bitcoin futures is between \$1.5 trillion–\$2 trillion worth in any given month, about slightly less than half of that for Ether. Compared to the traditional futures market, where a multiple of this is traded every day, it is a small change.²⁸

Another important metric to consider is funding rates. Perpetual funding rates indicate the market sentiment. Put simply, positive funding rates mean long traders pay short traders so that the price of the perpetual aligns with the spot price. If funding rates are consistently positive, markets are bullish. Consistently negative

funding rates are found in bear markets. Both Bitcoin and Ether funding rates have been hovering around 0%, which aligns perfectly with the slowdown in institutional interest from Form 13F filings and inflows into digital asset funds.

Professional investors are able to trade perpetual futures on several cryptocurrencies. According to data from Coinglass, Bitcoin and Ether have the highest open interest with \$13.13 billion and \$7.90 billion, respectively. They are followed by Ethereum Classic (ETC), SOL, XRP, Tether (USDT) and BNB.

²⁸ See CMEGroup

Figure 33 Open Interest in Digital Asset Perpetuals

Source: Coinglass

Rank	Symbol	Price, \$	24H Change	Funding	OI, \$
1	BTC	21,173.6	-1.00%	0.0026%	13.13B
2	ETH	1,556.9	-3.57%	-0.0025%	7.9B
3	ETC	32.055	-3.79%	-0.0273%	477.33M
4	SOL	34.26	-4.06%	-0.0105%	472.94M
5	XRP	0.3357	-1.90%	0.0028%	441.1M
6	USDT	1	+0.00%	0.0008%	336M
7	BNB	294.56	-0.08%	-0.0095%	319.86M
8	ADA	0.4453	-2.52%	-0.0227%	312.51M
9	EOS	1.507	+4.51%	-0.0128%	284.13M
10	DOT	7.107	-3.57%	-0.0181%	260.99M

Options

Options are one of the most important instruments for investors to hedge against unexpected volatility. Just as with futures, there are some options on digital assets that are issued by traditional institutions and others by cryptocurrency exchanges. Of those, Deribit is by far the most important. More than 95% of all cryptocurrency option trading activity happens on this exchange. The monthly volume of options transactions was between \$10 billion and \$20 billion for Bitcoin and between \$5 billion and \$15 billion for Ether-denominated options in 2022.

As you can see, the volume of options traded is about two orders of magnitude lower than that of futures. In traditional financial markets, the ratio of futures volume to options

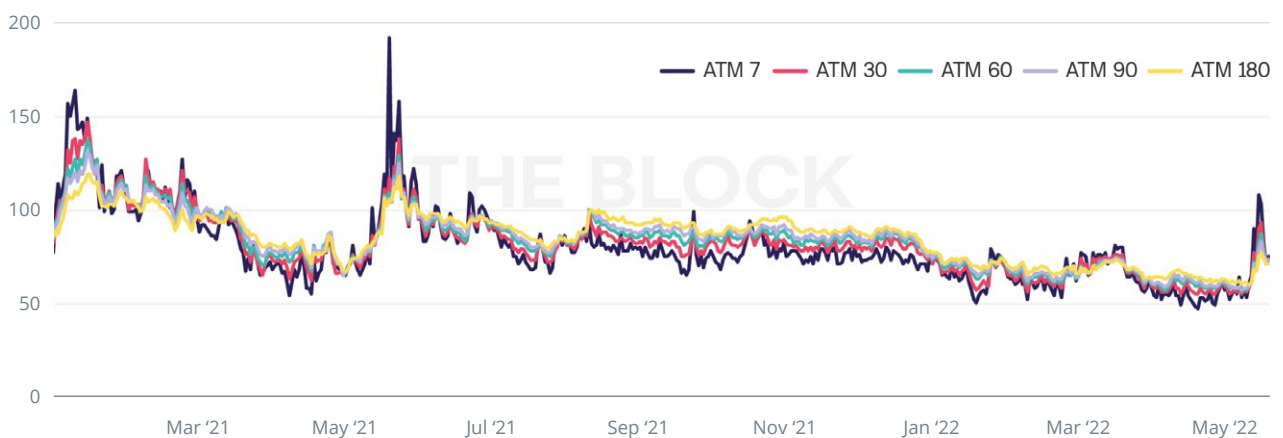
volume is around 3.9.²⁹ This indicates that derivatives options have a long way to go and represent the vast potential for growth.

An interesting picture emerges if we look at at-the-money implied volatility. This is a representation of future volatility that traders expect. We can see a slow but steady downtrend in ATM implied volatility for both Bitcoin and Ether. A notable exception is the peak in May 2022 following the demise of LUNA.

This ongoing downtrend is the hallmark of maturing markets and better hedging, which could be indicative of more institutional participation.

Figure 34 Bitcoin ATM Implied Volatility

Source: The Block



If we reconsider the chart overlaying Form 13F filings with Bitcoin's price, we can see that institutional interest is driven by price. When Bitcoin outperforms all other asset classes,

even institutions are willing to look past the regulatory uncertainty and volatility and want to get in. But digital asset prices have been mostly sideways or negative YoY.

²⁹ See BIS



Shyft Network powers trust on the blockchain and economies of trust.

Why Veriscope?

Veriscope is the only frictionless Crypto Travel Rule Compliance Solution.

Future Proof, Open Technology

Decentralised and ready for next generation VASPs (eg. DeFi).

Built by VASPs, for VASPs.

Majority of Transaction Flow

VASPs responsible for over 60% of global transaction flow already evaluating or integrating Veriscope.

Unparalleled support and industry alignment.

Robust Counterparty Due Diligence

Due diligence to internationally recognised standards, option to seek onchain verification from DLA Piper.

Selecting counterparty based on jurisdiction, license, and/or due diligence.

Pay-As-You-Go Model

No set-up fees.
No minimum charges.
No ongoing licensing.
Pay only per transaction.
Consistently low transaction fees.

Frictionless Customer Experience

Automated and accurate detection of beneficiary VASP details directly from the beneficiary's wallet address.

Historic Transaction Lookback

Permit lookbacks on any transaction of VASP broadcast to Veriscope before the date of integration ("Sunrise Issue").

Transaction broadcasts are immutable.

Secure PII Transmission

VASP to VASP transfer of PII. No storing of PII by Veriscope.

Securing to prevent data mining of your customer PII.

Interoperable

Integration with other Travel Rule protocols.

Integration with third party service providers to provide all-in-one solution.

Veriscope, a leading Travel Rule Solution, is built atop the Shyft Network to provide secure, peer-to-peer sharing of information between entities while protecting end-user privacy and data sovereignty.



Setting the highest standard for Crypto Travel Rule compliance, Veriscope is the go-to **Travel Rule Solution** of the crypto world's leading VASPs.

For more information, visit our website www.shyft.network



NO HIDDEN COSTS



QUICK TO INSTALL



EASY TO USE

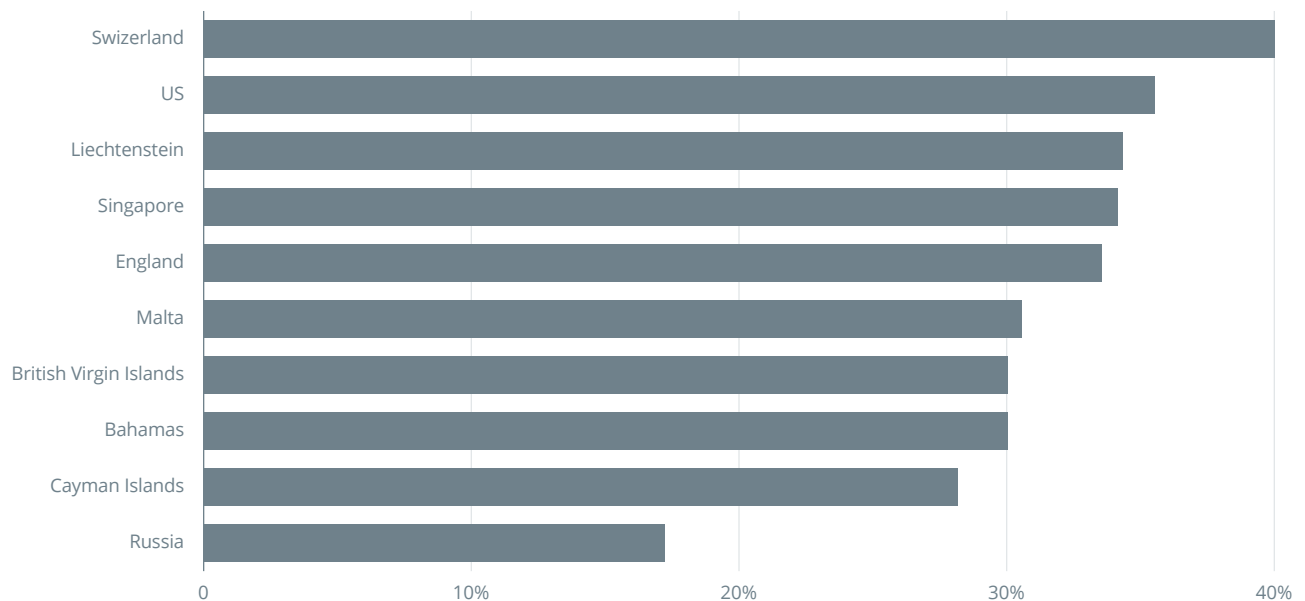
How Institutions Buy and Store Digital Assets

What happens if a professional investor decides to buy cryptocurrencies directly? What service providers and intermediaries will be involved in that transaction? This section focuses on the infrastructure stack that

institutional investors required in order to invest in digital assets. An overview of the main banks, custodians and market makers that facilitate institutional trades of digital assets across the globe is presented in ecosystem maps.

3.1 Cryptocurrency-Friendly Banks

Figure 35 Professional Investor Ranking of Each Geographic Jurisdiction's Investment Worthiness for the Incorporation of Blockchain-based Financial Products and Companies



Source: Cointelegraph Research

Figure 36 Banks that work with Crypto & Blockchain

North America

Morgan Stanley Morgan Stanley	usbank U.S. Bank	Vast.bank Vast Bank		
Goldman Sachs Goldman Sachs	COWEN Cowen	Silvergate Silvergate Bank	Signature SIGNATURE BANK* Signature Bank	
bank prov. Bankprov	customers bank Customers Bank	BNY MELLON BNY Mellon	ONYX JP Morgan Chase	
Custodia Custodia Bank / Avanti	WELLS FARGO Wells Fargo	ally Ally Bank	USA USAA	
JUNO Juno	dave Dave	ANCHORAGE DIGITAL Anchorage	QUONTIC Quontic Bank	citi Citigroup

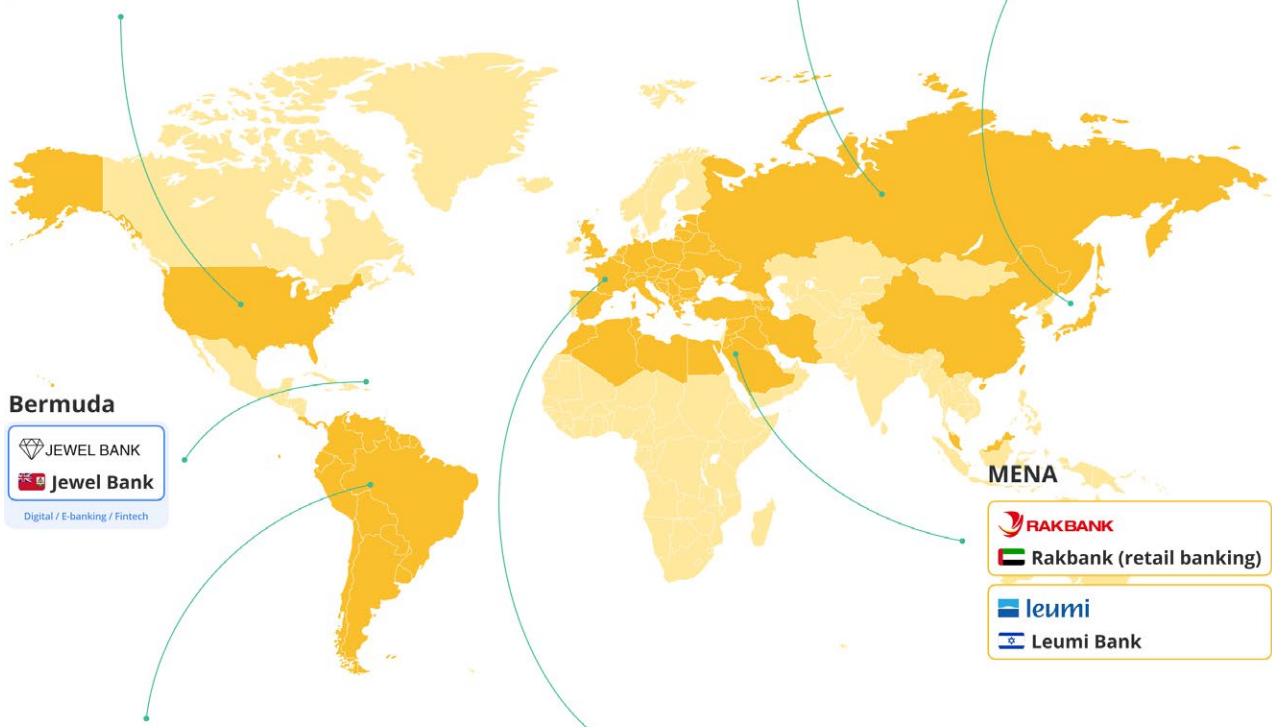
Digital / E-banking / Fintech

Russia/Eurasia

SBER Sber/Sberbank	TINKOFF Tinkoff
------------------------------	---------------------------

Asia

MUFG MUFG	SMBC SMBC
NOMURA Nomura	KB Kookmin Bank Kookmin Bank
SYGNUM Sygnum Bank	DBS DBS



Bermuda

JEWEL BANK Jewel Bank

Digital / E-banking / Fintech

South America

Itaú Itaú Unibanco
Santander Santander Brazil
Nubank Nubank
Galicia Banco Galicia
brubank Brubank
Banco de Bogotá Banco de Bogotá

Europe

SEBA SEBA	incore Incore Bank	MAERKI BAUMANN & CO. AG Maerki Baumann & Co. AG	BBVA BBVA	SYGNUM Sygnum Bank
Hypothekarbank Lenzburg Hypothekarbank Lenzburg	Arab Bank Switzerland Arab Bank Switzerland	SOCIETE GENERALE Societe Generale	CACEIS Caceis Investor Services	
BNP PARIBAS BNP Paribas	VON DER HEYDT Bankhaus von der Heydt	SUTOR BANK Sutor Bank	BANK FRICK Bank Frick	LGT BANK LGT Bank
Sella Banca Sella	finductive Finductive	SAXO BANK Saxo Bank	Bison Bison Bank	LHV LHV
standard chartered Standard Chartered Bank	WIREX Wirex (Wirexapp)	Revolut Revolut	fidor Fidor Bank	BANKERA Bankera

Digital / E-banking / Fintech

MENA

RAKBANK Rakbank (retail banking)
leumi Leumi Bank

Source: Cointelegraph Research



What kind of digital assets does BBVA offer to its clients?

In 2021, BBVA through its subsidiary in Switzerland incorporated the two most important protocols of the cryptoasset market in its value proposition, Bitcoin and Ethereum. The robustness of the Swiss banking system together with a regulatory framework in DLT allows us to be 100% aligned as players in this new space.

Is that for Europeans only?

Thanks to the open architecture of our service, our clients are mainly located in the geographies where BBVA is present. We have detected a strong appetite for cryptocurrencies among Latin America and Europe private banking investors, who want to diversify their investments, from private clients to institutional investors.

Do you have clients explicitly requesting access to cryptocurrencies or digital assets?

What's the sentiment?

The service is exclusively designed for clients seeking diversification in this type of assets and who want to personally manage their portfolios. The main advantage of this service is that they are able to integrate the management of their traditional portfolio with the digital one, while belonging to a bank with international presence, regulated and with more than 150 years of history.

In addition, we find that the investor profile that is interested in this type of asset does not respond to a specific age, geography or wealth level, but rather we are increasingly finding a more diverse client profile that is very interested in emerging technology and new trends.

Does BBVA have BTC and ETH products? Any other products planned for the year ahead?

For BBVA Switzerland, the correct direction is more important than speed. We started with the two most important protocols on the market which are also complementary and, of course, we will gradually incorporate new services adapting to the advances in technology, with the most absolute responsibility, always looking for a solid rationale for customers. Large Banks will be able to guarantee the proper and serious transition in a way where technology will be the catalyst to achieve new goals for the finance industry.



Silvia Ibarra,
Head of Client
Solutions
at BBVA
Switzerland





Led by former Morgan Stanley executives, Phemex is the most **efficient** cryptocurrency trading and investment platform.

According to CoinMarketCap, Phemex consistently ranks among the world's top 10 crypto exchanges in derivatives trading. In just three years of operation, Phemex serves around 5 million users in more than 200 countries and facilitates over \$10 billion in average daily trading volume.



Safe

We leverage our Morgan Stanley financial experience and professionalism to keep your assets safe in every way.

- Phemex wallet
- Security system
- Certified Legitimacy



Super

We pursue excellence in efficiency and speed, so you can always stay one step ahead.

- High Performance
- 365 x 24 System



Simple

We are simple, but not basic. We comprehensively consider user needs so you can enjoy an intuitive experience.

- Easy Registration
- Simple Trading
- Effortless Earning

Products



Earn

Introducing Phemex Savings; the safest place to keep your tokens while earning simultaneously. Get the highest APYs on the top tokens as well as enjoying Fixed and Flexible Account benefits. Phemex Launchpool is another sweet feature, with exclusive limited-time staking pools for the hottest tokens with highest rewards. Get paid hourly and unstake at any time, stress-free.



Spot

With over 5 million users across 200 different countries, our numbers speak for themselves. Phemex keeps on expanding because it pays to be with us; receive up to \$180 instantly upon signing up! The rewards just keep growing, as we have new events and activities weekly for our users to join in. Our platform is also made for convenience, with over 250 spot listings and more. With an easy-to-navigate platform and even a Simulated Trading tool to gain experience in the field, Phemex does it all.



Contract

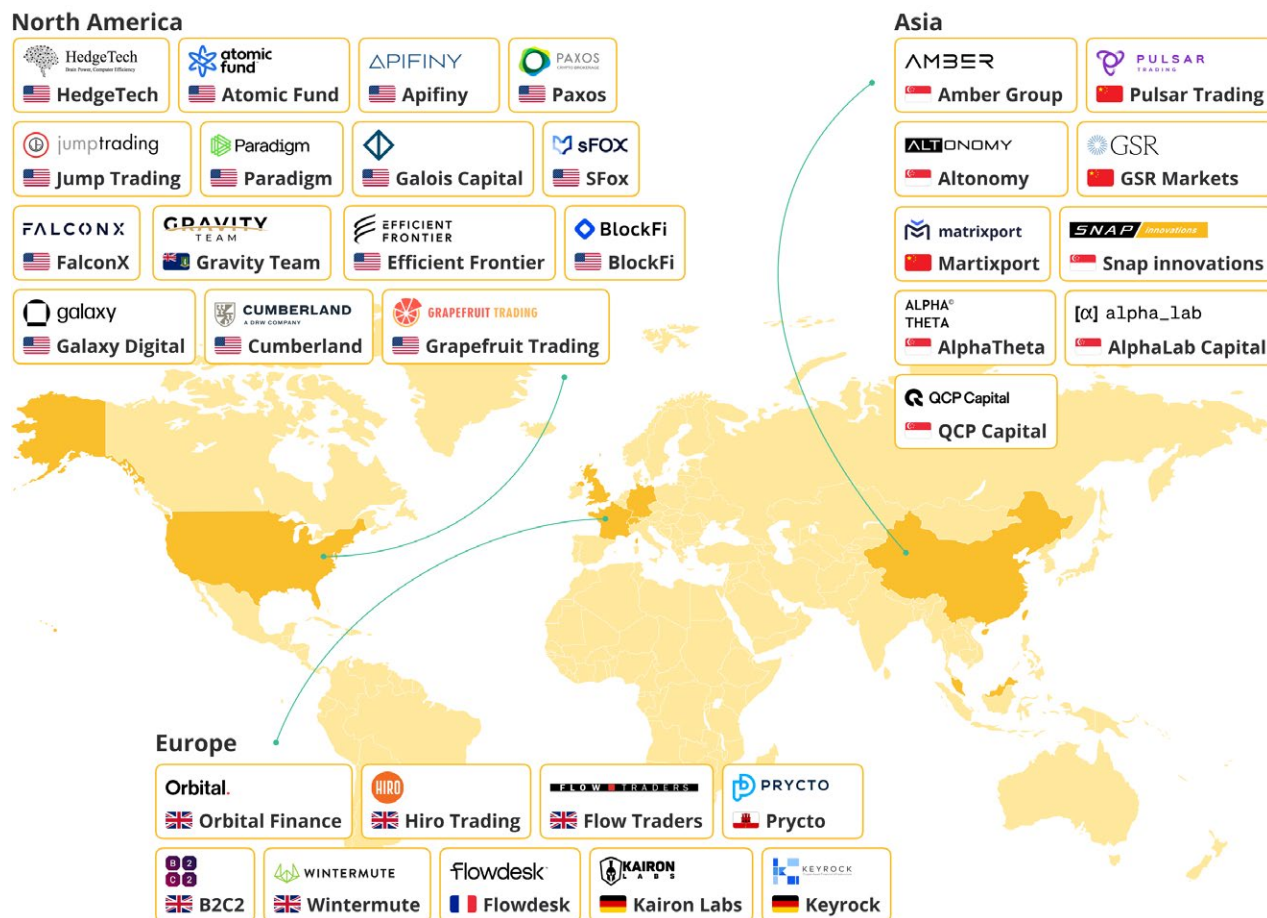
Phemex is made for simple yet powerful traders. We offer competitive fees for both takers and makers, on top of 140 contract trading pairs (with more to come!) up to 100x leverage. Be a newbie or a veteran trader; Phemex has something for everyone.

Phemex is offering up to **\$180** in Bitcoin trading bonuses

[Claim Now](#)

Market Makers

Figure 37 Crypto Market Makers



Source: Cointelegraph Research



Insider Insight

Why did Flow Traders move into crypto?

Back in 2017, we saw a growing demand in Bitcoin and Ethereum trackers. As global liquidity provider specialized in ETPs, it was a natural move for us to provide liquidity in products that were tracking cryptocurrencies.

We soon started making markets in cryptocurrency spot, futures and ETPs. We were able to leverage our technology stack and trading experience to start trading this new asset class. As the market developed, we started trading options, we became active on decentralized finance protocols, and we also created an OTC business.

What is a role of a market maker in crypto?

Market makers have always been very important for financial markets. It reduces spreads, it reduces volatility and also leads to fair price discovery of the quoted products.

Even more so for crypto, where the ability to invest in a project at a fair price can play an important role for the success of a project. Especially for projects where a well-diversified and decentralized distribution of tokens is key, a good market maker will have a big impact.



Michael Lie,
Head of Digital
Asset Trading
Flow Traders

As we started market making cryptocurrencies, it became apparent that we can add value beyond market making. We support ventures and the growth of the ecosystem with our experience in traditional finance and our capital, which is why we launched our venture fund Flow Traders Capital this year.

How do you view institutional adoption?

For institutional adoption of cryptocurrencies, the two most important factors are the market infrastructure and the state of regulation.

Over the last years, a lot has improved on the infrastructure, such as the exchanges where you can trade cryptocurrencies and the custody solutions that are being used. As for the regulation, it's not fully there yet, but implementation of regulations like MiCA will enable institutions to start adopting cryptocurrencies.

An example of a regulated product that has enabled institutional adaptation of cryptocurrencies are crypto ETPs. These are products that are traded on exchanges and track the price of cryptocurrencies. At the same time, these products are regulated and enable institution to gain cryptocurrency exposure, without having to deal with on which exchange they are going to buy the cryptocurrencies and what custody solution they are going to use.

Institutional Grade Cryptocurrency Custodians

Figure 38 Institutional Crypto Custodians

North America

Bakkt	Circle	Aegis Custody	Etana Custody
NYDIG	Sealblock	Genesis	Unchained Capital
Bankex	Paxos	Standard Custody	Prime Trust
Anchorage	Curve	Fireblocks	Entropy
Polysign	Gemini	BitGo	Floating Point Group
Tetra Trust	KNØX Custody	Brane Capital	

Asia-Pacific

Hex Trust	HashKey Custody	First Digital
OSL	Delchain	Liminal
Propine		
Atato	Digital Assets Custody Services	Cobo
Cactus Custody	Onchain Custodian	Cybavo
Safeheron	Binance Custody	Zerocap
Independent Reserve		

MENA

GK8	MidChains	Yoshi Markets
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Europe

BCB Group	Blockchain.com	BVNK	CoinJar	Copper	Custodiex	SETL	Qredo	Zodia
Parfin	Orbital Finance	Bitpanda Custody	Safequant	Digivault	Crypto Finance	Taurus Group		
InCore Bank	Covario	SEBA Bank	Sygnum Bank	Custodigit	KORE Technologies	Bitcoin Suisse		
Arab Bank Switzerland	Metaco	Solaris Digital Assets	Blocknox GmbH	Nyala	Finoa	Bank Frick		
Bankhaus von der Heydt	Tangany	Flowdesk	Dfns	BNP Paribas	Coinhouse	Ledgermatic		
NodeVenture	Riddle&Code	ONYZE	Prosegur Crypto	Venly	Conio	Bison Bank	Komainu	
Pycor	LCX							

Source: Cointelegraph Research



While self-custody (“your keys = your crypto”) remains the ideal for cryptocurrency purists, larger organizations, such as hedge funds and Web3-native entities, such as decentralized autonomous organizations (DAOs) have to grapple with the reality of growing regulation (by governments), risk (from hackers) and responsibility (to their clients).

The custody landscape, like everything else, is an emerging field with a range of heterogeneous solutions. In addition to the sheer number of options available, the expected secrecy of the industry makes it difficult to find details unless you are able to ask very specific questions and know the range of the offerings at hand.

The six key criteria

We’ve narrowed down the important factors for the potential custody user.

DeFi connectivity

The sprawling world of DeFi, with its decentralized lenders, trading platforms and native tokens, such as stablecoins, is continuously evolving. The ability to connect and trade seamlessly within and between these protocols is vital for clients, for whom DeFi represents a core part of their strategy.

Staking/yield services

Putting your money to work by staking (on a validator node) or earning yield (via DeFi protocols) is an increasingly vital part of crypto investing. It also requires time and effort that could be spent elsewhere, and the ability of a custodian to take on this role represents a distinct advantage for the professional investor.

Supported assets

History (especially recent history) has shown that there are no “safe” coins, so it is necessary to build a diversified portfolio, not only across tokens but also across chains. Ideally, a custodian should be able to support any asset you bring, but in reality, the ability to add new coins can be constrained in the case of older technology.

Pricing competitiveness

The traditional pricing structure is to charge based on asset value (assets under custody) and the number of transactions. New providers are increasingly innovating on pricing models, including offering fixed fee subscriptions, tiered by service level, which can mean significant savings in comparison to asset or activity-based fees (which are not capped). Thus, pricing structure (basis points or \$) is often more important than price level (25 bps vs. 35 bps).

Security

The most basic and most important service of a custodian is to keep assets safe. There are multiple methods that custodians use to keep your keys secure (MPC, HSM) and various ways in which they can demonstrate the efficacy of these systems (such as audits). Systems ultimately demonstrate their security when they manage to scale without being successfully hacked or experiencing a major code failure. But ultimately, a history of no major hacks or code failures is the truest testament to a system’s security.

Insurance

Since no security system is invulnerable and human beings are fallible, insurance is the last line of defense and should, in theory, provide users with ultimate peace of mind. The reality of crypto custody insurance is often patchy, so even if a custodian claims to be insured, it is important to pay attention to the level and terms of coverage, ideally with an expert trained to read the fine print.

The crypto landscape

There is not a single crypto custodian that scores highly on every dimension, and custodians exhibit different strengths. The right custodian depends very much on the needs of the client.



John Gu,
CEO of AlphaLab
Capital Group

[α]

The OGs

Example: BitGo. This group consists of qualified custodians whose clients are also highly regulated institutions — e.g., Fidelity, Calpers. Their service offering reflects the conservative trading needs of their client base, and while they may be relatively expensive, they are the ideal choice if your primary goal is to minimize risk.

New Guard

Examples: Fireblocks, Copper. The “second wave” of custodians has established a dominant position in an adjacent market to the OGs and differentiates itself by offering a broader range of services. As such, they are not primarily focused on minimizing risk. They attract clients — e.g., mid-sized hedge funds — with more complex trading requirements, for whom the trade-off between regulatory certainty and enhanced functionality makes sense.

Challengers/upstarts/wildcards

Example: Atato. This group often originates from non-Western markets. They compete with the New Guard, aiming to offer a similar or improved breadth of service — e.g., Atato’s “Bring Your Own Chain” offering supports all assets, past, present, and future — with enhanced usability and a lower price. They represent an attractive choice for smaller funds or startups with complex needs, higher price sensitivity and a willingness to take a chance on a new player.

Specialists

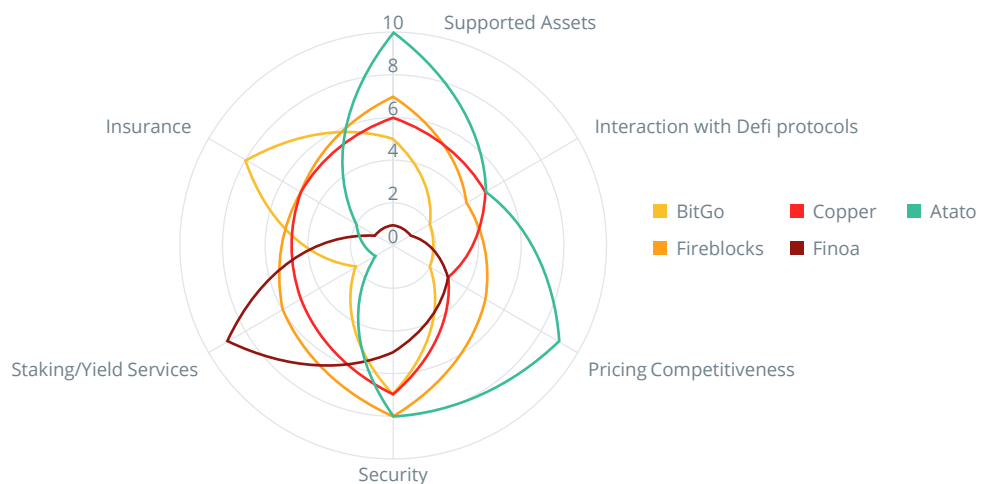
Example: Finoa. For investors who require deep expertise in a specific area — e.g., staking services — it may make sense to use a specialist custodian in lieu of or in addition to one of the generalists. In the future, one would expect the specialists to raise their performance across the other axes or for the generalists to raise their game to accommodate specialist needs. For now, a multi-custodian approach may be the best bet.

Conclusion

The above represents the current state of the market and not the end or ideal state. That said, we do not believe that winner-takes-all effects will prevail, leaving one or two dominant players as the main or only viable choice. The crypto investor market is uneven and calls for a range of players to fulfill various use cases. Knowing what you need is therefore key, and (for now at least) performing careful due diligence is paramount.

AlphaLab Capital Group is a technology-driven trading firm that transacts billions a day in crypto assets across 40+ exchanges, both centralized and decentralized. Since 2017, AlphaLab Capital has provided market liquidity and efficient price discovery while consistently generating exceptional returns — aka alpha. AlphaLab Capital Group operates thousands of trading algorithms 24/7 on a globally distributed network of 500+ trading servers. The team sits across three continents with headquarters in Singapore.

Crypto Custodian Comparison



Digital Asset Proposition

We have extensive expertise in market making and leverage our leading position within the global financial markets, to support founders and projects in the development of market infrastructure and the Digital Asset space.

Trading on 20+ digital asset exchanges globally, 24/7

Leading Crypto ETP market maker for 200+ listings globally

Publicly listed company on Euronext Amsterdam since 2015

Regulated with the DNB for crypto OTC activities since 2021

Exchange Traded Products and OTC

Flow Traders is a leading market maker in Crypto ETPs, offering liquidity in a wide range of crypto and multi-asset products.

In addition, Flow Traders has a crypto derivative offering and a multi-asset spot OTC desk (Currency, Crypto and Commodity).

Token Market Making

Proprietary trading algorithms to provide tight bid-ask spreads leading to a decrease in volatility and an increase in attractiveness to invest in the project.

For project seeking market makers Flow Traders can provide tailored propositions for deep liquidity and an extensive exchange network.

Venture Capital

Flow Traders Capital makes direct investments in ventures that accelerate growth, create greater transparency in financial markets and enables financial ecosystem scalability.

To support portfolio investments, we offer a combination of funding and a dedicated team with expertise in product development, capital market and go-to-market strategies.

LinkedIn:
Flow Traders

Twitter:
@flowtraders

Contact:
flowtraderscapital@flowtraders.com

JavaScript Meets Blockchain & Web3



Why Lisk



Open Source

Lisk products are developed completely in open-source.



Customizable

Develop blockchain applications with total flexibility.



Rooted in JavaScript

Committed to the most popular programming language.



Delegated Proof-of-Stake

Scalable and energy-efficient consensus algorithm.

The Blockchain Application Platform

The Lisk protocol is a layer-1 Blockchain Application Platform built for mass adoption. At the heart of this is the capability to develop blockchain applications using Node.js, based on the world's most commonly used coding language, **JavaScript**.

Accessibility through the SDK

By building blockchain applications using Lisk, **developers have greater autonomy over their projects**, using modules from the SDK to create unique web3 projects for any use case. Along with this, users may also develop blockchain applications with different proofing algorithms according to their specific needs.

Interoperability

One of the main focuses of the Lisk project from the start has been the **objective of providing effective interoperability**, both within

the Lisk network and with bridges to other chains as well.

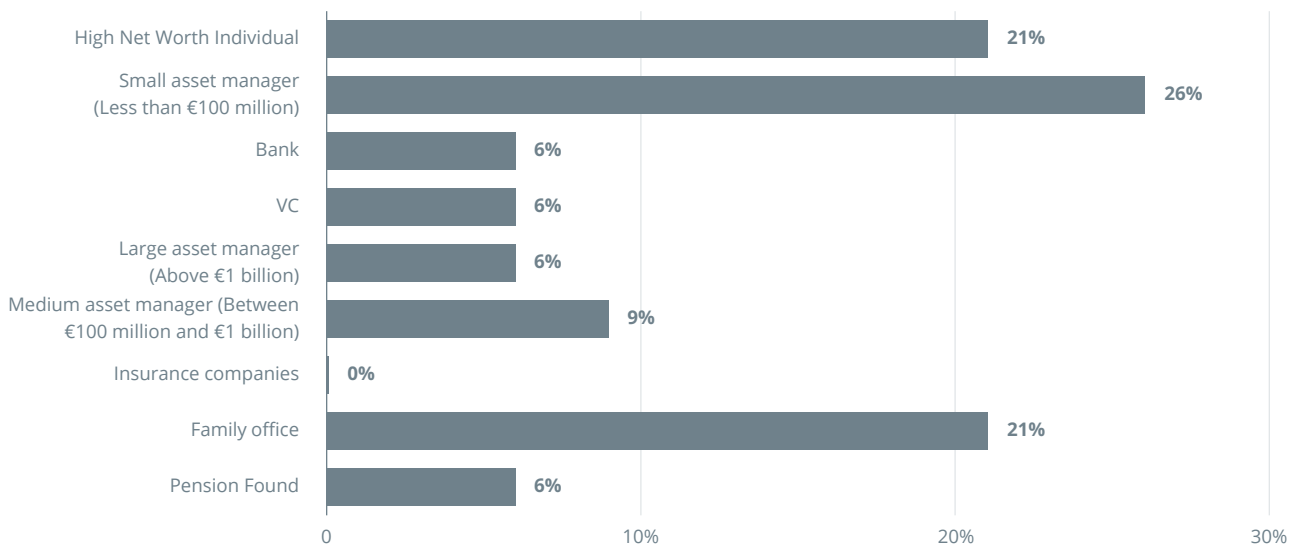
The Lisk team is currently moving steps closer to achieving the goal of bridging side chains together and is continually progressing closer toward full-scale interoperability.

The Ecosystem of Applications

With the goal of building a strong ecosystem of production-ready blockchain applications, Lisk is seeking teams who have the serious intention to build applications in the fields of **Lending, Stablecoins, NFT marketplaces, Collectibles, Prediction markets, Marketplaces, DAOs, Oracles** and more.

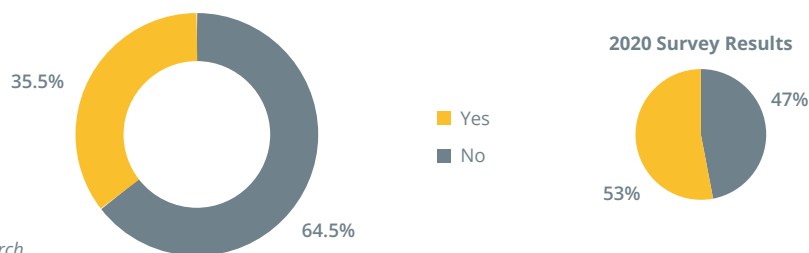
Demographics of Institutional Investors in Cryptocurrencies

Figure 39 What type of investor is your company?



Source: Cointelegraph Research

Figure 40 Are you personally invested into crypto assets?



Source: Cointelegraph Research

Close to 2/3 of the professional investors say they hold crypto assets in their personal portfolios. This represents a staggering increase of 18% since the last Cointelegraph survey was done two years ago. Several case study respondents stated that they had privately invested in Bitcoin and other digital assets, while their

institutions had not yet made any direct investments. However, the majority of respondents had a high level of decision-making ability within their firm. A possible explanation for this can be that asset allocators are investing with higher risk aversion when investing on the behalf of others than when investing their own wealth.

The majority of respondents had a master's degree or above in formal education.

Figure 41 How much decision making ability do you have within your company concerning what investments to make?

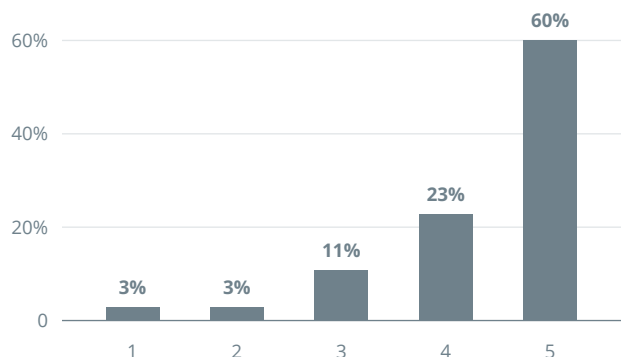


Figure 42 What level of education have you completed?

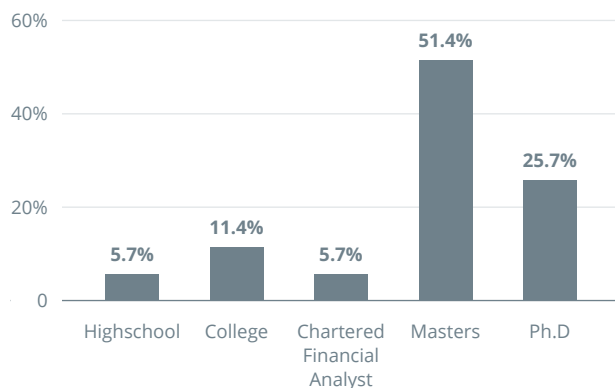


Figure 43 When did you first hear about Bitcoin?

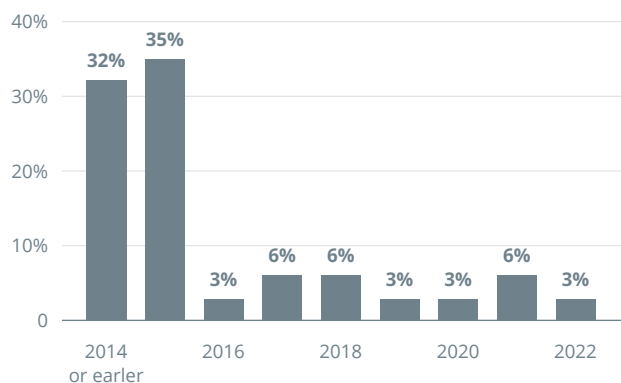
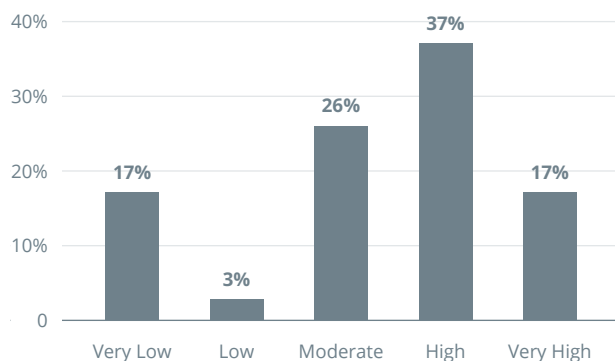


Figure 44 Assess your proficiency in crypto investments



Source: Cointelegraph Research



What is going to happen is, one of these intrepid pension funds, somebody who is a market leader, is going to say, you know what? We've got custody, Goldman Sachs is involved, Bloomberg has an index I can track my performance against, and they're going to buy. And all of the sudden, the second guy buys. The same FOMO [fear of missing out] that you saw in retail [will be] demonstrated by institutional investors.³⁰



Mike Novogratz, CEO of Galaxy Investment Partners | AUM \$1.9 Billion



I figure this is my third crypto winter. There's been plenty of ups and downs but I see that as an opportunity... I was raised to be a contrarian thinker and so I have this knee jerk reaction: If you believe that the fundamentals of a long term case are really strong, when everybody else is dipping [out], **that's the time to double down** and go extra hard into it.³¹



Abigail Johnson, CEO of Fidelity | AUM \$4.5 Billion



³⁰ See <https://www.investopedia.com/news/mike-novogratz-predicts-20t-crypto-industry/>

³¹ See <https://fortune.com/2022/06/10/fidelity-ceo-crypto-winter-bear-market/>

Institutional demand for digital assets comes in the form of:

- Direct cryptocurrency purchases, such as MicroStrategy buying more than 129,000 BTC to date or Tesla's \$2 billion in BTC holdings.³²
- Purchasing parts of cryptocurrency trusts, like Grayscale's Bitcoin Trust.
- Using derivatives like futures and options to trade digital asset price developments.
- Buying or selling NFTs like CryptoPunks.

The most vocal institutional holder of Bitcoin is the U.S. company MicroStrategy, whose CEO, Michael Saylor, purchased 129,218 BTC at an average price of \$45,714.³³ Latin American country El Salvador is another large institutional buyer of Bitcoin. President Nayib Bukele made Bitcoin a legal tender in September 2021, and the cryptocurrency has seen large success in terms of adoption. The move to introduce a highly volatile asset as legal tender, which business owners have to accept, has drawn a lot of criticism, with some accusing Bukele of starving the poor to gain Twitter recognition.³⁴ We will see how his bet plays out — after Bitcoin prices plunged in May 2022.

³² See CoinTelegraph: [Tesla held \\$2B of Bitcoin as of late 2021, SEC filing reveals](#)

³³ See CoinTelegraph: [MicroStrategy subsidiary adds another 4,197 BTC to balance sheet](#)

³⁴ See CoinTelegraph: [El Salvador: How it started vs. how it went with the Bitcoin Law in 2021](#)



VeVe is the largest digital collectible platform with over 6.6 million NFTs sold. Utilizing both blockchain and augmented reality technologies, VeVe offers premium licensed collectibles from leading brands including Marvel, Disney, Star Wars, CBS Viacom, Universal, DC/Warner Bros, MGM, Sony and more.

How does it work?

VeVe's 3D augmented reality photo mode allows collectors to interact with every digital collectible as well as share their collectibles through the in-app social feed or external social platforms such as Twitter, Instagram, TikTok and more.



VeVe Digital Collectibles is available on web, iOS and Android

ESG details

VeVe is committed to 100% carbon neutral NFTs and provided \$7+ million in grants to environmental nonprofits to raise money for causes through NFT promotions. VeVe uses Ethereum's layer 2 scaling protocol, Immutable X.

Instant trade confirmation

Zero gas fees

99.9% reduction in environmental footprint

Scalability (over 9,000 trades per second)



Contact us to find out more

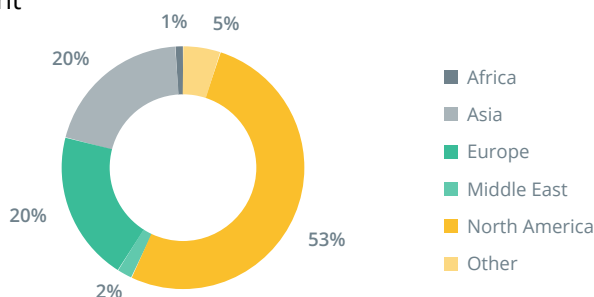
Geographic Dispersion of Professional Investors Investing in Cryptocurrencies

The crypto industry has been around for over a decade now and, like many other industries, started with speculative use cases focused on retail users, which goes hand-in-hand with high volatility. Institutional adoption is a direct result of more mature and institutional-grade products in the market, in turn leading to a positive feedback loop with growing institutional interest and products that stand the rigorous tests of compliance and scalability. Pre-2017, crypto liquidity was limited to a handful of exchanges with a few million dollars in volume across all assets — this has dramatically changed in recent years. More liquidity venues with subsequent on-off ramps between fiat and crypto have been vital to crypto succeeding in institutional use cases.

According to Fidelity's study, adoption rates in Asia are higher (71%) than in Europe and the United States.³⁵ Fidelity found that 56% of Europeans and 33% of U.S. institutions now hold investments in digital assets, up from 45% and 27%, respectively.

As of the end of Q4 2021, there were more than 860 crypto funds across the globe with primary offices in more than 80 countries, according to data from Crypto Fund Research. The pace of new fund launches began to accelerate in the first quarter of 2021, and this trend continued during the rest of 2021 as new fund launches outpaced fund closures for six consecutive quarters. Just over half of all crypto funds are based in North America, most of which are in the United States. Europe and Asia are each home to around 20% of funds.

Figure 45 Crypto Funds by Continent
Primary Office Q4 '21



Source: [Crypto Fund Research](#)

United States

With institutional demand for more actively managed cryptocurrency investments picking up steam, the asset management industry has begun to address the needs of this neglected space. The first signs of institutional interest were about getting initial exposure to Bitcoin and Ether, either directly or through passive products. Now, the appetite is going beyond this initial exposure to differentiated strategies and an attempt to get more exposure to this growing asset class. Pensions, endowments and foundations have still been some of the slowest investors to adopt cryptocurrencies, according to a Fidelity survey of institutional investors in January 2022. Large pension plans like the Houston Firefighters' Relief and Retirement Fund, for example, have announced crypto allocations, but most are still small. The Houston fund's 2021 allocation to investments in Bitcoin and Ether comprised only 0.5% of its \$5.2-billion portfolio.

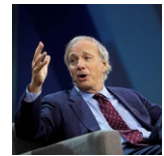
Hedge funds, registered investment advisers and some companies step up their stakes in cryptocurrencies as the market becomes more mainstream. Institutional clients traded \$1.14 trillion worth of cryptocurrencies on the Coinbase exchange in 2021, up from just \$120 billion the year before and more than twice the \$535 billion for retail. A survey of 300 institutional investors conducted by State Street in October 2021 found that more than 80% were now allowed to have exposure to cryptocurrencies. Large funds with assets of \$500 billion or more under management were the most excited, and nearly two-thirds of them had dedicated staff for the crypto market. While the majority of crypto funds have a primary office location in the U.S., fewer 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.

³⁵ See [Fidelity: Digital Assets Survey](#)



I believe in blockchain technology. There's going to be that revolution, so it has earned credibility. Bitcoin is like gold, though gold is the well established blue-chip alternative to fiat money.³⁶

Ray Dalio, Former CEO of Bridgewater Associates | \$140 Million



The growth of institutional investment has changed the way cryptocurrency markets behave. Now, digital markets have started to mirror traditional markets as we can see with the high correlation exhibited. Large banks such as Morgan Stanley, Citi and Goldman Sachs are starting to offer their clients a wide array of digital assets. As of now, traditional financial institutions prefer trading futures and options over perpetual offerings, which are usually seen as short-term exposure products due to the unpredictability of their funding. With that said, Wall Street is ramping up crypto offerings in wealth management, trading and even investment banking after years of resistance. It is possible to trade listed options and futures on some well-known digital coins on the Chicago Mercantile Exchange, while Goldman Sachs traded its first over-the-counter Bitcoin options this March. Meanwhile, BlackRock joined a \$400-million funding round in stablecoin issuer Circle last month, and many asset managers are planning cryptocurrency funds to satisfy demand from younger, savvier investors. In April 2022, Fidelity Investments announced plans to include Bitcoin as an option in 401(k) retirement accounts.

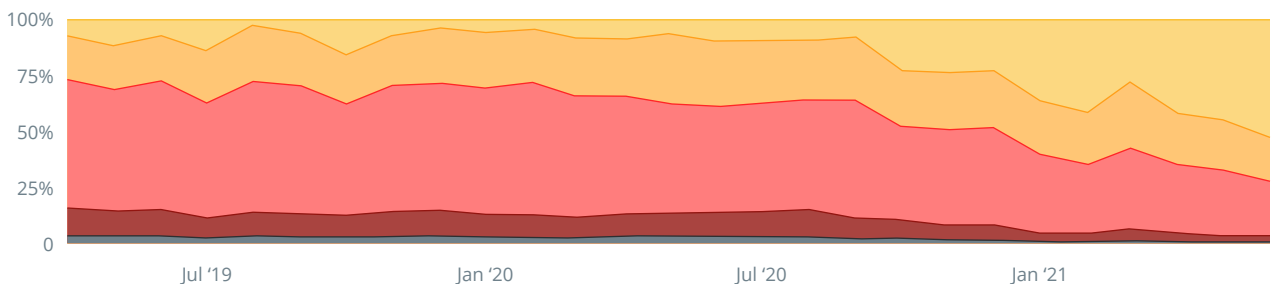
Europe, Middle East and Africa (EMEA)

In terms of crypto adoption, Europeans aren't lagging behind. Assets in European exchange-traded products

(ETPs) and mutual funds with cryptocurrency exposure have topped 10.5 billion euros, according to Morningstar data, showing the potential appeal of these products for asset managers. XBT, part of CoinShares, is the largest provider in Europe, with assets of 5.4 billion euros across eight products domiciled in Sweden and Jersey, followed by Swiss group 21Shares, which manages 2.1 billion euros across its range. Ruffer Investment Management, a fund manager based in Britain, made a \$745-million bet on Bitcoin in December 2020. Ruffer's allocation fetched \$27.3 billion in assets, which it claimed would work as a hedge. It effectively secured 6,500 clients against the risks involved in a fragile digital economy.

DeFi, a blanket term for a network of decentralized, noncustodial financial protocols focused on lending, yield farming, crypto derivatives and other products, has reportedly given a huge boost to the cryptocurrency industry in England, France, Germany and other European countries. According to Chainalysis, European institutional investors are embracing DeFi; transaction volume in Central, Northern and Western Europe grew significantly across virtually all cryptocurrencies and service types, especially on DeFi protocols. An influx of institutional investment, signaled by large transactions, drove most of the growth.

Figure 46 Central, Northern & Western Europe Share of Transaction Volume by Transfer Size, Apr '19 – Jun '21



Source: Chainalysis

Legend: Large institutional (yellow), Institutional (orange), Professional (red), Large retail (dark red), Small retail (grey)

³⁶ See <https://www.coindesk.com/business/2022/03/21/ray-dalios-bridgewater-investing-in-crypto-fund-sources/>

In 2021, venture capital reached record levels of investment, with investments in Europe increasing. European VC's pumped a record \$2.2 billion into cryptocurrency and DeFi startups in 2021, which is up considerably compared to \$473 million in 2018. They are backing markets for digital assets such as NFTs, payments infrastructure and DeFi startups. French soccer-focused NFT trading platform Sorare became a unicorn several times over in 2021 after it had raised a \$680-million funding round. Some of the other notable native crypto ventures include:

- Blossom Capital, a VC firm, already participated in MoonPay's recent \$432-million fund to back Series A startups in Europe.
- Berlin-based VC firm Cherry Ventures launched its first fund targeted at crypto startups, with \$34 million ready to invest, having already participated in rounds for Lido, Morpho and Radicle.
- In late 2021, Greenfield One raised one of the largest crypto funds ever in Europe, with \$160 million to invest in crypto startups. The VC firm has already invested in crypto companies such as Celo, Dapper Labs, Colony, 1inch, Near Protocol and others.
- In December 2021, Kraken Ventures launched a new \$65-million fund, with key hires to lead European investment in crypto startups.
- Brussels-based Tioga Capital announced the closing of its first fund, with \$70 million to invest in crypto startups. The new VC firm is targeting Seed and Series A deals in blockchain and digital asset companies.
- LeadBlock Partners announced its plan to close its first fund at \$100 million for business-to-business blockchain startups. Its portfolio includes industry leaders such as BlockFi or Bitpanda.

Beyond crypto-focused venture capital funds, there are several European-based firms focused on tech that also invest in crypto companies, including:

- Vito Ventures
- Seed+Speed
- Earlybird VC
- High-Tech Gründerfonds
- Mosaic Ventures
- HV Holtzbrinck Ventures
- Point Nine Capital
- Lunar Ventures
- XAnge.

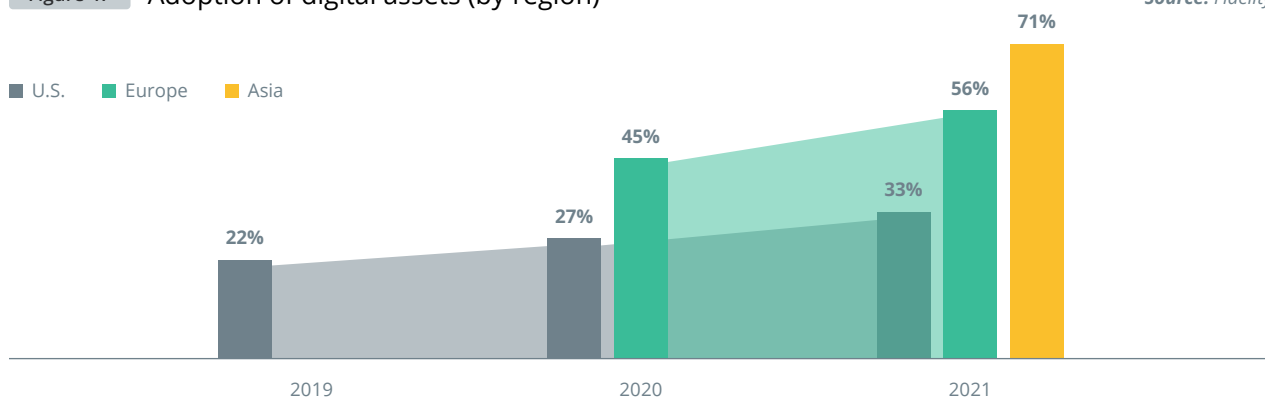
As we look forward, Europe is moving more cautiously, with the exception of Switzerland. Brussels has started to put a legal framework in place via the Markets in Crypto-assets Regulation (MiCA), which is expected to come into effect in 2023. MiCA includes a pilot regime that is a sandbox for the security tokens. This is encouraging the private sector to look beyond simply trading and investing in coins to developing security tokens.

In Europe, asset management regulation may limit the ability of undertakings for collective investment in transferable securities funds, which form the bulk of mutual funds sold across the European Union to invest in cryptocurrencies, but the market for cryptocurrency-linked ETPs are seeing strong growth.

Asia-Pacific (APAC)

Asia was definitely an early mover when it came to institutional focus on digital assets, but the rest of the world is starting to catch up. According to Fidelity's 2021 Institutional Adoption of Digital Assets survey, Asia has the most institutional investors with allocations to digital assets.

Figure 47 Adoption of digital assets (by region)



Source: Fidelity



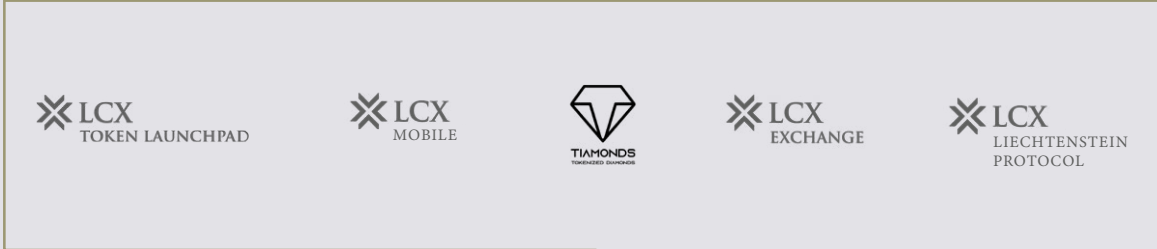
LCX is building a financial ecosystem for crypto and fiat alike to become the new category leader in the digital asset economy.

Liechtenstein Cryptoassets Exchange

- > LCX is pioneering a blockchain infrastructure bridging the gap between traditional monetary systems.
- > LCX offers a Compliant Token sale solution combining all legal and technical aspects. Unique worldwide.
- > LCX's ecosystem includes LCX Exchange, a centralized crypto exchange, and LCX Fire Salamander, a DeFi DEX aggregator.
- > LCX believes in the future of tokenization and launched the largest tokenized diamonds marketplace at Tiamonds.com.

Business Overview

LCX Benefit Highlights



LCX Benefit Highlights

LCX Exchange

- LCX is a regulated crypto platform and has received 8 blockchain registration from Financial Market Authority Liechtenstein. From a wide range of cryptocurrencies to seamless trading experience, LCX exchange is the secured platform for crypto enthusiasts.
- >

LCX Token Launchpad

- Fully compliant token issuance solution combining all legal and technological aspects, from smart contract development, token sale legal documents, registration at regulator, investor on-boarding to KYC, VIP investor support. LCX's goal is to allow project teams to focus on building products while we handle their token sale.
- >

LCX Liechtenstein Protocol

- Liechtenstein has a legal framework called the Token and Trusted Technology Service Provider Act (Officially: Token- und VT-Dienstleister-Gesetz; TVTG) also known as the Blockchain Act. The Liechtenstein Protocol standard, and its first iteration, is programmed to automatically enforce specific conditions that relate to legal and regulatory requirements applicable to securities and enables automated compliance of the tokenized asset with pre-defined requirements built in the code.
- >

LCX Mobile

- LCX has developed a mobile application that facilitates your crypto journey. From trading on-the-go to participating in token sales, LCX Mobile allows you to manage every aspect of your profile. It is accessible through the apple store and google store.
- >

LCX DeFi Terminal "Fire Salamander"

- DeFi Terminal's limit order protocol has been engineered, down to its smart contract, to take full advantage of Uniswap to make your trading experience even better. The combination of DeFi Terminal's lightning fast markets page, beautiful trading view charting and limit orders functionality truly takes our platform to a whole new level with incredible performance, security, reliability, while maintaining everything users love about LCX's platform.
- >



Key Partners & Advisors

Until recently, unless an investment firm launched as a digital-native crypto fund, it was challenging to enter the market in a significant way due to concerns around security, custody, liquidity, settlement, regulation, Anti-Money Laundering, etc. These have largely been addressed over the past few years with the help of firms like Talos, and we are now seeing the largest institutional investors enter the markets at scale, in Asia and globally. Having recognized crypto's high yield potential, traditional asset managers are exploring how to best

capitalize on this asset class, with players such as Fidelity Investments investing heavily into a Hong Kong-based crypto operator. Heightened institutional interest has also driven more digital asset management platforms innovating and coming up with more sophisticated products that cater to a wider range of users with diverse risk appetites. In fact, in 2021, the Malaysia-based BCMG Genesis Bitcoin Fund-I, or BGBF-I, was officially launched, claiming to have become the first insured institutional crypto product available in the Southeast Asian region.



I haven't heard a good argument about [why you wouldn't put 1%](#) of your liquid net worth in bitcoin.³⁷

Bill Miller, CEO of Miller Value Partners | +\$1.9 Billion



A few jurisdictions are vying for the position of Asia's crypto hub, including Singapore and Hong Kong. Singapore has emerged as one of, if not the, leading crypto hubs in the world for a few reasons: its progressive regulatory stance on digital assets, its business-friendly climate, and its strong fintech ecosystem and talent base.

Outside of Singapore, Thailand has been buzzing with active participation from crypto startups and traditional financial institutions alike. Thailand's fourth-largest bank, Kasikornbank, started experimenting with DeFi, on top of recently introducing its own NFT marketplace. The country's oldest lender, Siam Commercial Bank, has also entered the game, having acquired a majority stake in Thailand's largest digital asset exchange Bitkub.

One way in which Asia lags behind the West, however, is in its lack of crypto ETPs. Following the launch of several Bitcoin ETFs in the U.S. and Canada and other crypto ETP listings in Europe, the Asia-Pacific market appears ripe for crypto funds. Asset managers in the region are actively looking to explore opportunities and have an understanding of the regulators' attitudes toward these products. Those attitudes diverge considerably across Asia. Singapore has started granting regulatory consent to service providers of virtual assets under its Payment Services Act and security tokens under the Securities and Futures Act. China has gone in the opposite direction, declaring all crypto-related transactions in the country are illegal, including services provided by offshore exchanges. Despite such inconsistencies, Asia as a whole is a dominant force in crypto.

Figure 48

Source: State Street

	Exchange Traded Funds (ETFs)	Exchange Traded Products (ETPs) / Exchange Traded Notes (ETNs)
Purpose	Exchange products to give exposure to crypto	Exchange products to give exposure to crypto
Trading	Secondary trading on exchange	Secondary trading on exchange
Regulatory status	Subject to fund regulation, e.g., 40' Act, UCITS, etc.	Not subject to fund regulation, e.g., listed debt instrument
Depository and / or control duties	Following fund regulation e.g., control functions	No regulatory requirements
Retail Distribution in North America	Yes, in US and Canada	Not yet
Retail Distribution in Europe	Not yet	Yes
Retail Distribution in Asia-Pacific	Not yet	Not yet

³⁷ See <https://news.bitcoin.com/veteran-investor-bill-miller-remains-bullish-on-bitcoin-confirms-he-has-a-lot-of-btc/>

A Chainalysis report found that 40% of the Bitcoin on-chain activity conducted on the top 50 exchanges originates in Asia-Pacific. To date, investors in the region seeking exposure to crypto assets, such as hedge funds and family offices, have turned to private funds that are commonly domiciled in offshore jurisdictions and make use of alternative fund structures. Those asset managers looking to launch ETFs may see initial participation in crypto via alternative funds as a means of not only testing market demand but also reassuring regulators about the issuance of mainstream ETF structures for crypto in their markets. The new Asia-Pacific edition of The Global Family Office Report 2021 by Campden Wealth with Raffles Family Office revealed only 19% of family offices in Asia-Pacific invested in cryptocurrency, a notable shortfall in contrast to peers in North America, at 31%, and Europe,

at 28%. Cryptocurrency formed a mere 2% of portfolio allocations in the region. However, the outsized returns made in digital assets in 2021 have caught the attention of family offices in Asia-Pacific. According to the report, more than one-third of family offices in the region planned on increasing their investment in cryptocurrency in 2022.

Notably, Amber Group has raised \$200 million in a fundraising round led by Singapore's state-owned investment firm Temasek, boosting the valuation of the cryptocurrency financial services firm to \$3 billion. Investors include existing shareholders Sequoia China, Tiger Global Management, the venture capital arm of crypto exchange Coinbase, as well as Pantera Capital, a crypto hedge fund founded by a former Tiger Management executive.

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- ▶ Instant crypto transfers between supported exchanges
- ▶ Cross-margining across CEXes and DEXes for more efficient arbitrage
- ▶ Managed account infrastructure allowing flexible access control rights
- ▶ Analytics for key market indicators, such as volumes, spreads, correlation etc.
- ▶ Financing, lending & borrowing in addition to native 3rd party borrowing facilities
- ▶ Segregated accounts
- ▶ OTC block trading
- ▶ Capital Introduction services

Integrated Exchanges

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OKX	BitMEX	FTX
KUCCOIN	kraken	HitBTC
BYBIT	UNISWAP	AAVE

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to the top
DeFi markets



Swap on
Uniswap. Borrow
or deposit &
earn on Aave



Portfolio
margining



Supported via
Fireblocks



DeFi-specific
collateral
management



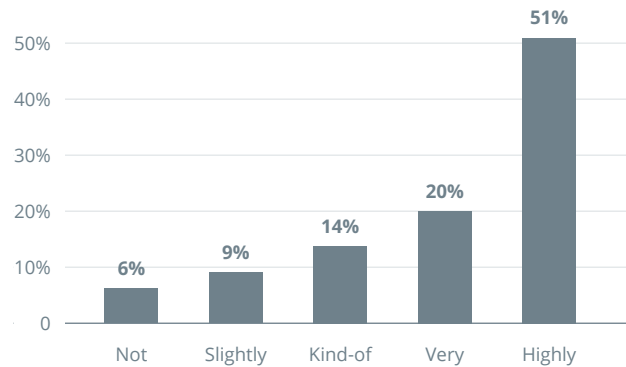
API or
GUI
access

Obstacles to Institutional Cryptocurrency Adoption

Asset managers were asked to rate the importance of perceived risks when investing in crypto assets; the possible risks were the following: liquidity risks, operational risks (technological risks), cybercrime and fraud, regulatory risks, and market risks (volatility). All of the risks mentioned are in the “important spectrum” of the charts. However, the most important risk for those surveyed was liquidity risk.

This is a stark difference from the 2020 Cointelegraph survey of professional investors. In 2020, regulatory risk was the most important perceived risk. Almost 80% of the sample fell in the “important region” of the graph. With approximately 71% and 70% of responses in the “important region,” market risk and liquidity were ranked as the second and third most important risks, respectively. Operational and cybercrime risks have the same number of responses in the “important region” (~ 68%).

Figure 49 Liquidity risks



Source: Cointelegraph Research

Institutional buyers display a higher degree of sophistication than their retail counterparts. High liquidity and ability to hedge price fluctuations are among the top requirements before institutions are comfortable deploying meaningful amounts of capital.



Insider Insight

How do you get the best price execution in crypto? Do you need the best price execution in crypto?

At sFOX, we believe in radical transparency and best price execution. sFOX was built by traders to help buy-side and institutional investors navigate the increasingly fragmented digital asset marketplace. We have aggregated the top exchanges and liquidity providers in the market to create deep bespoke pools of liquidity for our customers. Our liquidity pools are composed of unique orthogonal market makers, thus enabling customer execution into a highly skewed and often choice or inverted market. sFOX provides a master orderbook of 30+ top exchanges and OTCs across 80+ markets, providing 10x deeper liquidity than any other single exchange — enabling trades at speed and scale, without impacting the market.

Best price execution is critical for any individual or institution, which utilizes higher volume strategies but also has significant benefits for the average spot trader. By identifying the best possible prices available to complete the desired transaction, sFOX clients are able to get the most out of their assets and effectively execute their chosen strategy while minimizing costs.

Akbar Thobhani, co-founder and CEO of sFOX

What is the need for an aggregated crypto liquidity provider?

The crypto market continues to be very fragmented, which creates challenges for investors whether they are individuals or institutions. At any given time someone could log in to one of the many crypto exchanges



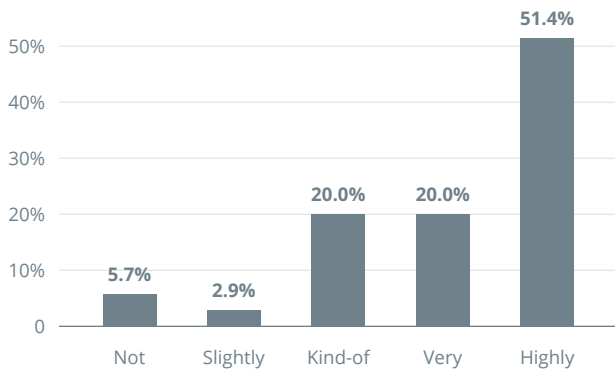
Akbar Thobhani,
co-founder and
CEO of sFOX



or brokerage sites and get a different price for their transactions or have wildly varied transaction times. As we have seen in the news recently, many platforms struggle to maintain liquidity independently to fill large orders and even may have outright failures to execute on certain trades or withdrawal requests. By aggregating liquidity across numerous providers, sFOX is able to ensure that even the largest client transactions are able to be successfully filled.

Akbar Thobhani is a co-founder and the CEO of sFOX, a full-service crypto prime broker bringing together liquidity, best price execution, dark pool access, treasury management, and custody and settlement services all together in one trading platform and API. Prior to co-founding sFOX, Thobhani served as head of growth and business development at Airbnb, where he managed payments for over 190 countries. With vast experience in trading and payments, Thobhani has developed several platform solutions for companies, such as ITG, Boku and Stamps.com. He started his career as a software engineer at the NASA Jet Propulsion Laboratory. Thobhani earned his MBA from the Massachusetts Institute of Technology where he started mining Bitcoin before it was popular.

Figure 50 Operational Risks (e.g. Technological risks)



Another blocker for institutional investors is the uncertain regulatory environment and the murky tax implications of holding cryptocurrencies on their balance sheet. As much as crypto proponents decry regulatory creep, it has to be admitted that no pension fund, no money manager and no savings and loan bank will invest considerable sums into digital assets without regulatory clarity. It is up to the industry to engage in dialogue with lawmakers worldwide and demonstrate thought leadership. This way, the thinking of regulators can be informed and decisions-guided. Looking from a perspective of institutional demand, we can only hope that the adversarial thinking that is so prevalent in crypto gives way to a pragmatic approach focused on engagement and education.

Figure 51 Cybercrime and Fraud

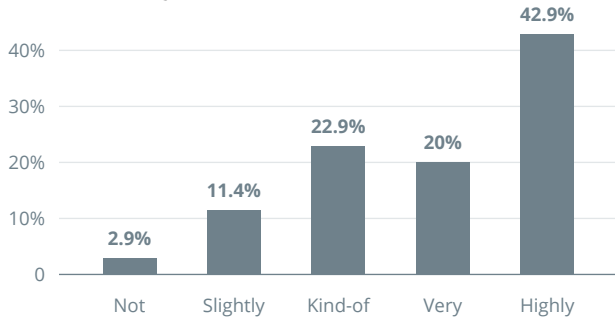


Figure 53 Would your company like to invest more but are bound by regulatory restrictions?

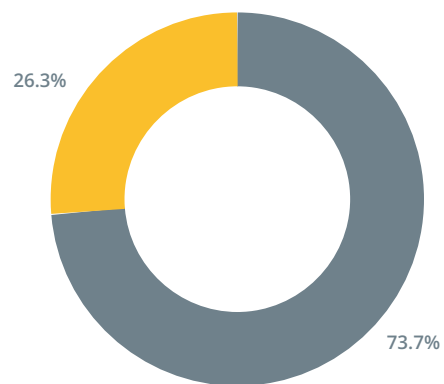
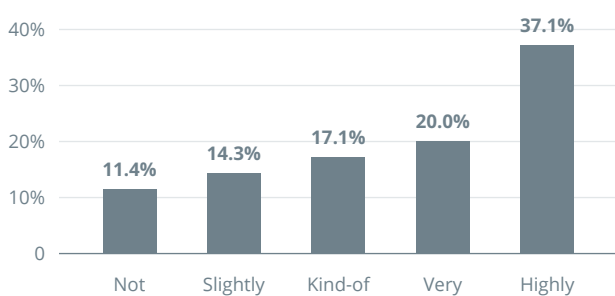


Figure 52 Regulatory Risks



Source: Cointelegraph Research



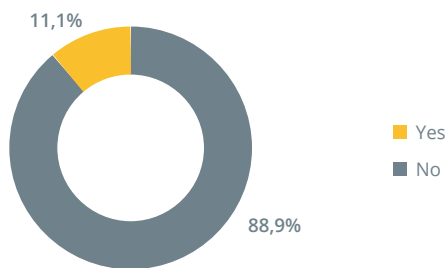
I haven't put a lot of money outside of bitcoin obviously... You know, tens of millions, hundreds of millions — like small capital right now. It could get very big. But irrespective of what I do, I will say is we all need to pay attention to it, because [I think the implications are enormous.](#)³⁸



SOCIAL CAPITAL_

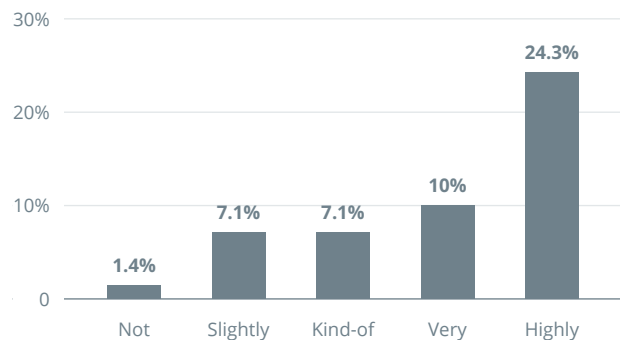
Chamath Palihapitiya, CEO of Social Capital | +\$1 Billion

Figure 54 Would you like to invest more but are bound by internal company restrictions?



Source: Cointelegraph Research

Figure 55 Market risks (e.g. Volatility)



Source: Cointelegraph Research

The 2020 Cointelegraph survey found that price volatility was the main barrier to adoption, followed by a lack of fundamentals to gauge value and concerns around market manipulation; however, investors cited less concern about complexity for institutions and market infrastructure complexity than previously.

We talked to Lisk, a blockchain network with a utility token, to get insights into a practitioner's perspective on institutional barriers to entry to digital assets and how Lisk is helping solve these.



Insider Insight

What is Lisk?

Founded by Max Kordek and Oliver Beddows in early 2016 and based on its own blockchain network and utility token (LSK), Lisk is an accessible blockchain platform for building applications using JavaScript. It allows developers to create, distribute and monetize JavaScript-based blockchain applications and enables developers to join the Lisk ecosystem.



lisk.com

Before blockchain can achieve its full potential, further adoption is needed. Lisk is determined to solve this problem by becoming a safe and secure gateway to this technology for developers and enthusiasts alike. One example of Lisk's determination to facilitate the mass adoption of blockchain technology is the Lisk SDK offering, which is an [open-source](#) software development kit that enables developers to build scalable blockchain applications in JavaScript with ease. Extensive knowledge of blockchain technology is not necessary to utilize the Lisk SDK and begin your journey into blockchain.

The Lisk Interoperability Solution is another key aspect of the Lisk platform in their journey to make blockchain more accessible. Interoperability within the Lisk ecosystem will allow data and assets to be transferred between separate blockchains, improving scalability, liquidity and composability for the entire

³⁸ See <https://markets.businessinsider.com/news/currencies/chamath-palihapitiya-bitcoin-holdings-crypto-hard-to-kill-regulation-2021-9>

blockchain landscape. Interoperability is considered by many to be the key to blockchain being fully embraced by mainstream enterprise.

What are the barriers to entry for blockchain, and how is Lisk solving this problem?

The barriers to mass adoption of blockchain technology are caused by lack of knowledge and understanding of the technology and the true value it can offer users and developers alike. While most developers have heard of blockchain and decentralization, many do not understand the intricacies associated with its application. Lisk provides an easy gateway into blockchain development. Right now, there are nearly 14 million JavaScript developers in the world, all of whom have the untapped potential to build next-generation blockchain applications on Lisk.

Lisk allows developers to build and launch fully-functional blockchain applications using JavaScript, the world's most popular programming language. Ultimately, it saves valuable costs and resources for teams which would otherwise need to train and hire personnel to code in less common languages.

How is Lisk making blockchain accessible to users and enterprises alike?

Blockchain has a tangible impact on a business' bottom line, offering the potential for reduced third-party and administrative burdens and promising consumers a seamless online experience through prospective lower costs and increased security. Lisk is an open-source blockchain network that allows modern businesses to innovate on this emerging technology, while meeting consumer and stakeholder expectations in terms of scalability, security and sustainability.

Today's blockchain world is burdened with high transaction fees and slow settlement speeds. Lisk aims to solve the problem of congestion through the deployment of sidechains. Each application built on Lisk will not run on the same mainchain, but rather be built on its own unique blockchain. The highly anticipated Lisk Interoperability Solution will enable each sidechain to communicate with the mainchain and other sidechains, so all of the applications are still part of one decentralized ecosystem and can transact with one another. In the future, Lisk will be fully interoperable with other blockchain networks, too.

What innovations alongside interoperability are needed to reach mass adoption of blockchain technology?

Alongside Lisk's upcoming Lisk Interoperability Solution is the Lisk SDK, which allows users to easily build blockchain applications compatible with the Lisk protocol in JavaScript. The architecture of the Lisk SDK has been designed so that it can be extended to meet the requirements of many blockchain use cases. To access Lisk SDK tutorials, [please visit Lisk's website](#) at Lisk.com.

How technically competent does a user need to be to build on Lisk?

The key mission behind Lisk is to make blockchain technology accessible to everyone. To achieve this, the architecture of the Lisk SDK has been designed so that it can be extended to meet the requirements of a wide variety of blockchain application use cases. The codebase is written entirely in JavaScript, which means, for a majority of developers, no significant change of tools or knowledge base is required to get started. The Lisk SDK has blockchain functionality built into its core so that users are provided with a simple and easy-to-use interface that will enable them to build blockchain applications without needing a previous in-depth knowledge of blockchain technology. As long as users are willing to embrace this technology, the Lisk SDK will act as the stepping stone to welcoming new developers into the industry.

What is Lisk doing to attract developers to build on the platform?

Lisk offers developers a route to get serious about blockchain projects through the Lisk Grant Program. The Lisk Grant Program was created with the purpose of attracting both entrepreneurs and developers into the Lisk ecosystem to build blockchain applications. This program allows not only the showcasing of diverse use cases for Lisk, but also the creation of tools, such as custom plugins, modules, API wrappers or new testing

suites. In order to support the development of blockchain applications on the Lisk platform, Lisk is offering a significant prize fund per application built with the Lisk SDK.

With the goal of building a strong ecosystem of production-ready blockchain applications, Lisk is seeking teams that have the serious intention to build applications in the fields of lending, stablecoins, NFT marketplaces, collectibles, prediction markets, social media markets, DAOs, oracles and more. Examples of some of these projects building on Lisk are DAO platforms, such as Kalipo, as well as decentralized NFT marketplaces such as Colecti.



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➤ Developed to meet large institutions' high-stakes performance, reliability, and security requirements, Finoa provides a full range of financial services including custody and staking. Confidently navigate the digital asset ecosystem with a sophisticated platform.



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Staking

Stake your assets, earning a return while supporting protocol decentralization. We work with vetted validators and enable rewards directly from your Finoa account.



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As a German-regulated crypto asset custodian, Finoa has the same level of operational security and anti-money-laundering practices as other regulated financial institutions.



FLOW



MINA



NEAR



POLKADOT

+180

Supported assets

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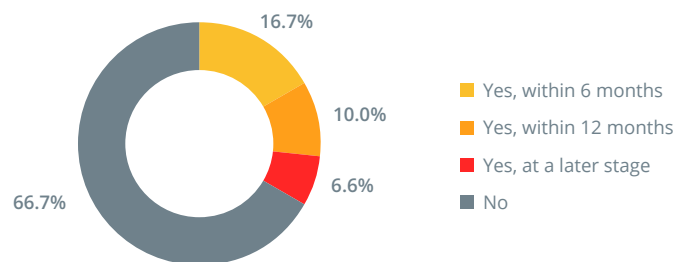
Dapper

COINLIST

Outlook on Institutional Demand for Cryptocurrencies

Future Plans to Buy Cryptocurrencies

Figure 56 Is Your Company Planning to Invest in the Future?

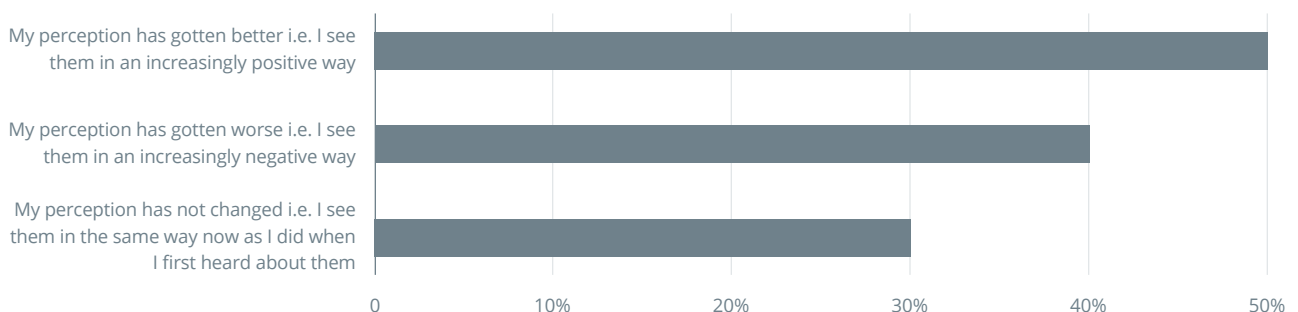


Source: Cointelegraph Research

Out of the 84 respondents from the Cointelegraph 2022 survey of professional investors, 48 reported that they are not currently owning cryptocurrencies. Out of those 48 people, two-thirds reported that they do not plan to ever invest in cryptocurrencies. On the other hand, one-

third reported that they do plan to buy cryptocurrencies sometime in the future. This is in stark contrast to the results of the Fidelity survey which found 70% of the institutional investors are expected to buy digital assets in the future.³⁹

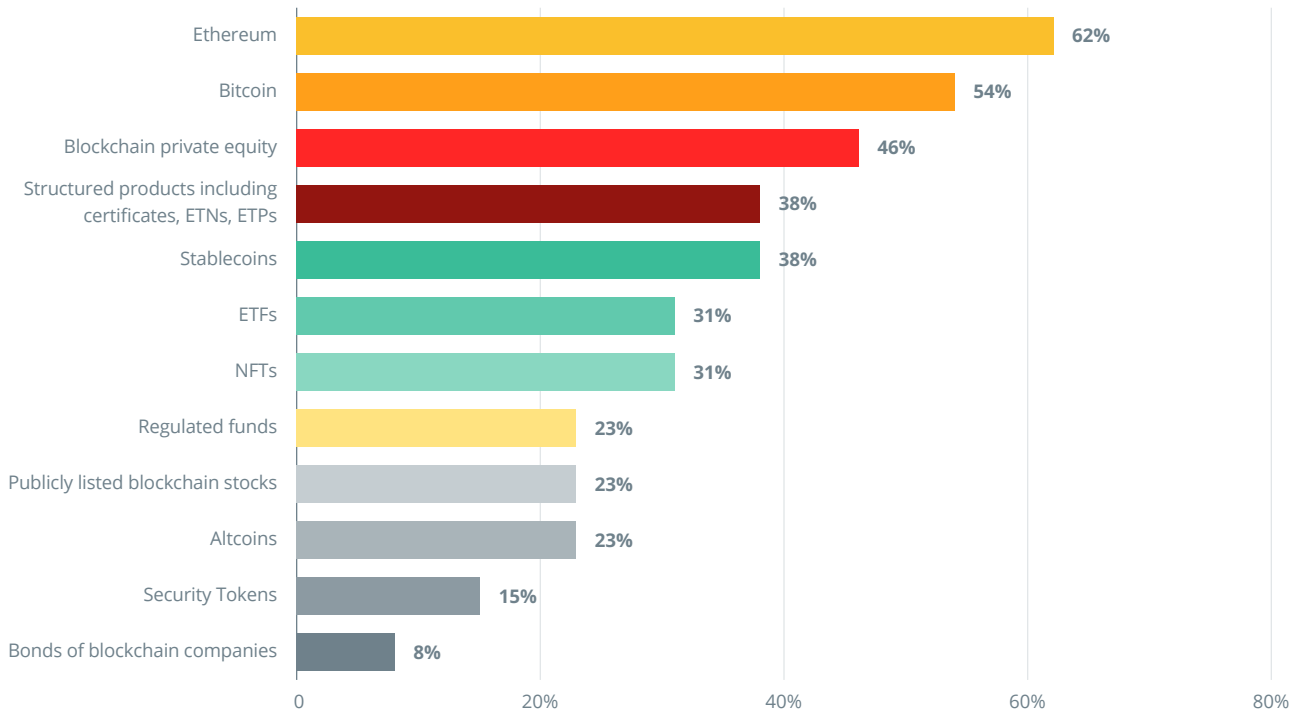
Figure 57 How has your perception of crypto assets changed over the last five years?



Source: Cointelegraph Research

³⁹ https://www.fidelitydigitalassets.com/sites/default/files/documents/2021-digital-asset-study_0.pdf

Figure 58 Which digital assets would your company be interested in investing into in future?



Source: Cointelegraph Research

A few anti-cryptocurrency respondents commented on why they do not own cryptocurrencies, commenting, “Crypto is pure speculation, where unlike Dutch tulips and other bubbles, there is no underlying asset

base,” and “It’s rubbish and there is very little real risk management. Just smoke-and-mirrors,” and “I would rather invest in lottery tickets than crypto.”



Women control about 80% of retail spending and retailers haven’t yet realized that they can save 2%, and they usually run on very thin margins so that might be like double their profits. They can [save 2% just by accepting bitcoin](#) instead of taking a bank-issued credit card. And that can change everything.⁴⁰

Tim Draper, Founder of Draper Ventures & Draper Associates | +\$250 Million



Institutional demand is driven by the availability of sophisticated trading instruments, but it also drives their development — a classic chicken-and-egg dynamic. We’re seeing markets maturing but nowhere near the speed at which the digital assets and DeFi, in particular, innovate.

The last six years have been dominated by the fat protocol thesis⁴¹ of cryptocurrency investing. In a nutshell, it posits that the majority of value is captured at the protocol level in digital assets, and only a small portion at the application level.

That is likely to change soon, as blockspace becomes more of a commodity. Many blockchains have a more or less identical feature set by now, and Ethereum Virtual Machine compatibility plus improvements in bridging technology mean that applications can move from chain to chain or deploy on multiple platforms at once.

Bridging technology like Layer Zero, Quant and THORchain, to some extent, add one more option for institutional demand. But ultimately, blockchains are the medium of of transmission and storage. When we look at the historic development of telephone

⁴⁰ See https://www.youtube.com/watch?v=9L66tm_faR0

⁴¹ See Avi Felman: [Exploring the Fat Protocol Thesis](#)

networks, we can glimpse how this is likely to play out. While a lot of values are captured on the “protocol” or infrastructure level initially, these companies do not worth even a fraction of the applications building on top of telecommunication infrastructure. Depending on the exact definition, it could be argued that 6 out of the 10 most valuable companies in the world are built on top of telecom infrastructure.

It is very much likely that this will repeat with blockchain technology, as it should, since a chain with no application other than the sending and receiving of tokens is very limited in value. This is why we assume that institutional investors will invest in the application of tokens in the near future to a higher degree than into native blockchains.

One major blocker into institutional demand for digital assets we have seen across the board is regulatory concerns. Banking is one of the most tightly regulated industries in the world, and as a result, bankers do not feel comfortable investing substantial amounts into assets with unclear legal implications.

The recent Tornado Cash sanctions⁴² placed tens of Ethereum addresses on a U.S. Office of Foreign Assets Control list and illustrated the validity of legal concerns quite well. From one day to the next, transacting with these smart contracts could be fined with up to 30 years of jail, and substantial funds were frozen in the protocols vaults, even though they belong to users.

Another major concern is liquidity and market contagion. The collapse of TerraUSD (UST) was caused in part by the transaction bandwidth constraints of the Ethereum blockchain and lack of deep liquidity in even the largest stablecoin pools.⁴³

We expect institutional demand to start growing much faster when and if regulators offer clarity on the legal and tax implications of digital asset investments. This adoption will also solve most of the liquidity concerns. Institutional demand will enable institutional supply and vice versa. If transactions are taking place on chains themselves or on permissioned rollups or even in private pools, it will be interesting to see.

⁴² See Cointelegraph: [Anonymous user sends ETH from Tornado Cash to prominent figures](#)

⁴³ See Cointelegraph: [Two key takeaways from Nansen’s UST stablecoin depeg report](#)

 ENERGI INTRODUCES



THE MOST USER-CENTRIC NFT MARKETPLACE

The GMI Marketplace will aim to increase NFT adoption by building an ecosystem where user safety is key, with a rewarding protocol for users to trade NFTs, stake our native GMI tokens and invite their friends onto the network.

HOW IS GMI DIFFERENT

GMI is the native token of the GonnaMakelt NFT Marketplace, set to launch in Q3 of 2022.

GMI will have an initial airdrop for thousands of users to jump-start the marketplace's user base on the first day of launch.

The airdrop will reward all users based on their OpenSea volume since its inception, after which powerful incentives are provided to lock-up their tokens into a GMI farming pool.



LOCK-UP INCENTIVE

The majority of GMI released (69%) is released through farming rewards, with rewards skewed towards those locking for long periods of time. This significantly reduces the available token supply.



STRONG SECURITY

GonnaMakelt and the GMI token will exist on both the Ethereum and Energi blockchains. On the Energi blockchain, GMI will benefit from Energi's industry-leading security where we have virtually eliminated blockchain crime.



NO WASH TRADING

All of our incentives are geared towards real value adds, such as increasing liquidity for the GMI-ETH trading pair and liquidity incentives for NFTs listed on GonnaMakelt.

For more information, visit www.gonnamakelt.com

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