2020 Crypto Hedge Fund Report

pwc

ELWOOD

Contents

Introduction to Crypto Hedge Fund report

In this report we provide an overview of the global crypto hedge fund landscape and offer insights into both quantitative elements (such as liquidity terms, trading of cryptocurrencies and performance) and qualitative aspects, such as best practice with respect to custody and governance. By sharing these insights with the broader crypto industry, our goal is to encourage the adoption of sound practices by market participants as the ecosystem matures.

The data contained in this report comes from research that was conducted in Q1 2020 across the largest global crypto hedge funds by assets under management (AuM). This report specifically focuses on crypto hedge funds and excludes data from crypto index/tracking/passive funds and crypto venture capital funds.

Key Takeaways:

Size of the Market and AuM:

- We estimate that the total AuM of crypto hedge funds globally increased to over US$2 billion in 2019 from US$1 billion the previous year.
- The percentage of crypto hedge funds with an AuM of over US$20 million increased in 2019 from 19% to 35%.
- The average AuM increased from US$21.9 million to US$44 million, while median AuM increased from US$4.3 million to US$8.2 million.
- The median AuM at fund launch is US$2 million, indicating that funds have generally seen a 4X increase in AuM in 2019.

Performance and Fees:

- The median crypto hedge fund returned +30% in 2019 (vs -46% in 2018).
- The median of the best performing by strategy in 2019 was discretionary long only (+40%) followed by discretionary long-short (+33%), quantitative (+30%) and multi-strategy (+15%).
- Median management and performance fees remained unchanged at 2% and 20% respectively, although the average management fee increased from 1.7% to 2.3% and the performance fee decreased from 23.5% to 21.1%.
- 65% of crypto hedge funds have either a hard or soft lock and 63% have either an investor level or fund level gate.

Investor Type and Average Ticket Size:

- The vast majority of investors in crypto hedge funds (90%) are either family offices (48%) or high-net worth individuals (42%).
- The median ticket size is US$0.3 million, while the average ticket size is US$3.1 million.
- Almost two thirds of crypto hedge funds have average ticket sizes below US$0.5 million.
- Crypto hedge funds have a median of 28 investors.

Fund Strategies, Activities and Trading:

- The most common crypto hedge fund strategy is quantitative (48% of funds), followed by discretionary long only (19%), discretionary long/short (17%), and multi-strategy (17%).
- Most crypto hedge funds trade Bitcoin (97%) followed by Ethereum (67%), XRP (38%), Litecoin (38%), Bitcoin Cash (31%) and EOS (25%).
- About half of crypto hedge funds trade derivatives (56%) or are active short sellers (48%).
- Crypto hedge funds are also involved in cryptocurrency staking (42%), lending (38%) and borrowing (27%).

Governance:

- The percentage of crypto hedge funds using an independent custodian increased in 2019 from 52% to 81%.
- The percentage with at least one independent director on their board increased from 25% to 43% in 2019.
- The percentage of crypto hedge funds using third party research increased from 7% to 38% in 2019.
- 86% were using an independent fund administrator in 2019.

Location:

- Funds tend to be domiciled in the same jurisdictions as traditional hedge funds, with the top three being the Cayman Islands (42%), the United States (38%) and the British Virgin Islands (BVI) (8%).
- Over half of crypto hedge fund managers are based in the United States (52%), followed by the United Kingdom (15%).

Survey Data

This report shares the results of survey-based research conducted in Q1 2020 by Elwood Asset Management, combined with qualitative inputs on sound practices observed within the crypto hedge fund space from PwC's crypto team. The report focuses on actively managed crypto hedge funds which invest/trade in liquid, public cryptocurrencies and other instruments.

This report excludes:

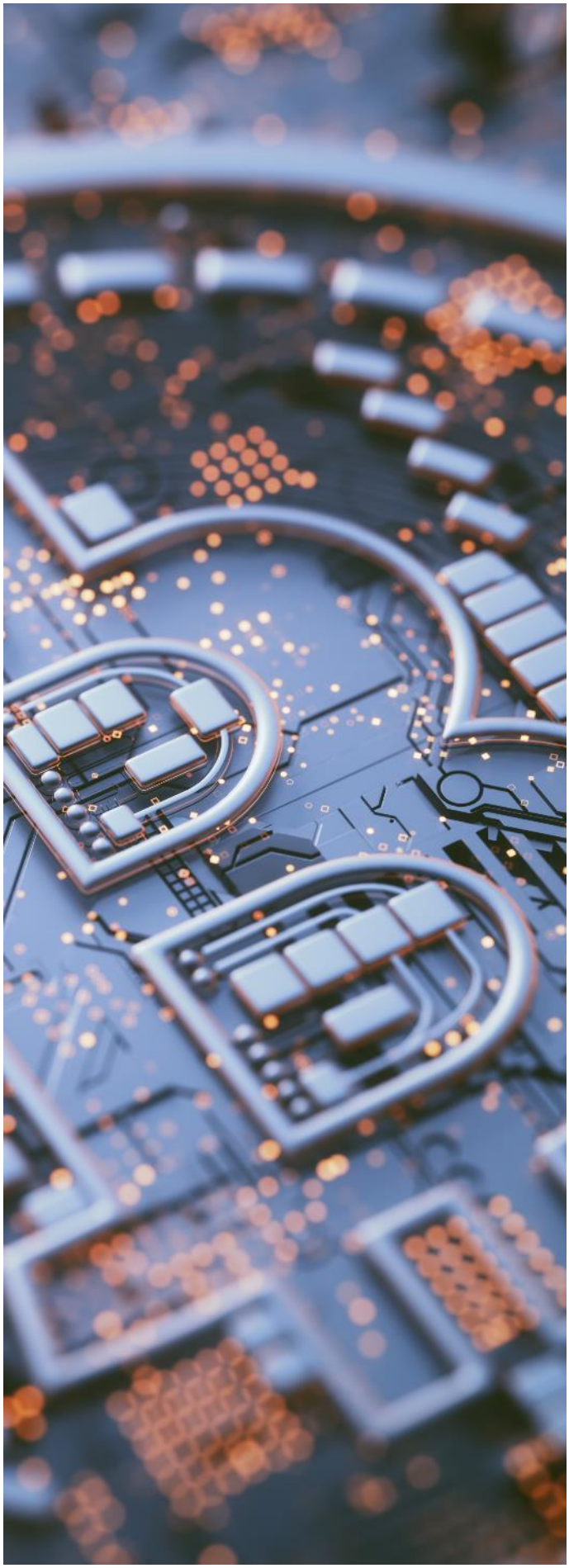
- Crypto index funds (including passive/tracker funds); and
- Crypto venture capital funds (which make equity type investments)

Given the focus of the report, there were certain participants in the survey whose data we needed to exclude from the final results, as our research showed they were not actively managed crypto hedge funds as described above.

While most crypto hedge funds provided responses to all the survey questions, some were not in a position to provide information on certain topics/questions. However, all data analysed in this report is based on information provided by a majority of the funds that we surveyed.

There is an inherent element of survivorship bias in the fund universe surveyed, as the report only includes crypto hedge funds that were in operation in Q1 2020. Funds that were forced to shut down prior to this date due to the difficult market conditions of 2019 have been excluded. The data in this report, including performance data, was provided by crypto hedge fund managers directly and has not been verified by an independent fund administrator or other third-party auditors.

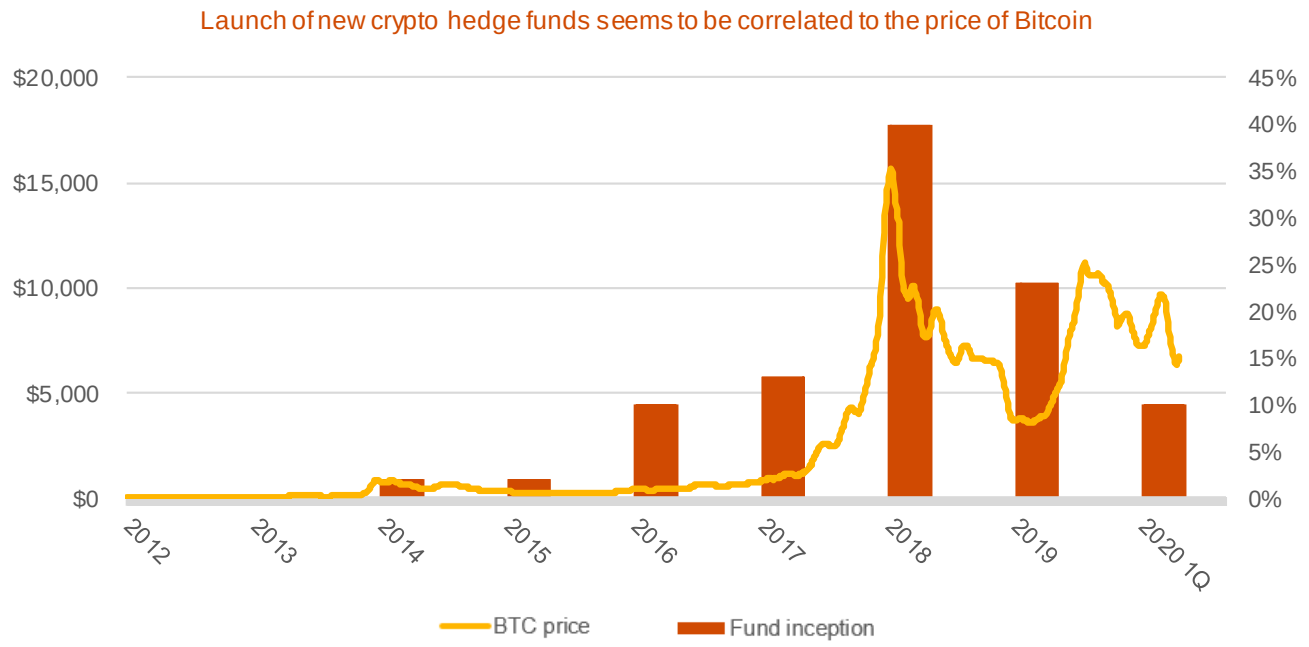
Finally, all participants were asked to give consent to Elwood Asset Management and PwC for their name to be shared in the report. Some firms requested that their name not be shared. Those which have given their consent are listed in alphabetical order in the appendix. However, individual firms have not been linked to any specific comment or data point.



Investment Data

Strategy Insights

Our Q1 2020 research shows that there are around 150 active crypto hedge funds. Almost two thirds of these (63%) were launched in 2018 or 2019.

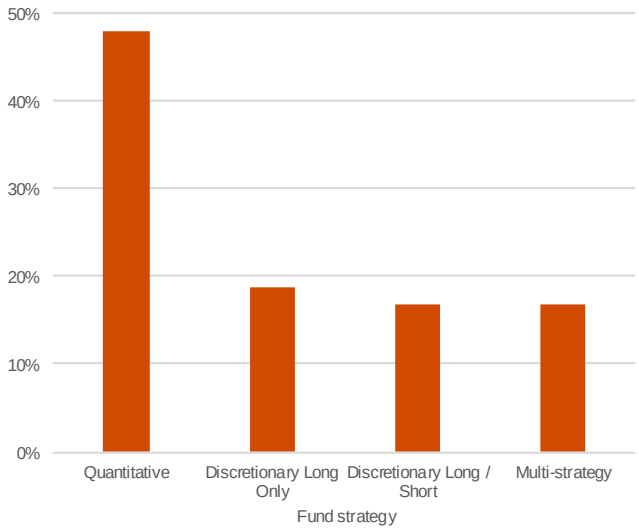


As shown by the graph above, the launch of actively managed crypto funds is highly correlated with the price of Bitcoin (BTC). The Bitcoin price spike in 2018 appears to have been a catalyst for further crypto funds to launch. We can also see a material decline in new fund launches as crypto markets trended downward at the end of 2019.

This year, we have classified crypto hedge funds according to four broad fund strategies:

- **Discretionary Long Only**: Funds which are long only and whose investors have a longer investment horizon. These funds tend to invest in early stage token / coin projects, and they also buy and hold more liquid cryptocurrencies. These funds tend to have the longest lock-up periods for investors.
- **Discretionary Long/Short**: Funds which cover a broad range of strategies including: long/short, relative value, event driven, technical analysis and some strategies which are crypto specific, such as mining. Discretionary funds often have hybrid strategies which can include investing in early stage projects.
- **Quantitative**: Funds taking a quantitative approach to the market in either a directional or a market neutral manner. Indicative strategies include: market-making, arbitrage and low latency trading. Liquidity is key for these strategies and restricts these funds to only trading more liquid cryptocurrencies.
- **Multi-strategy:** Funds adopting a combination of the above strategies. For instance, within the limitations set in the prospectus of a particular fund, traders may manage discretionary long/short and quantitative sub-accounts.

Most common strategies of crypto hedge funds

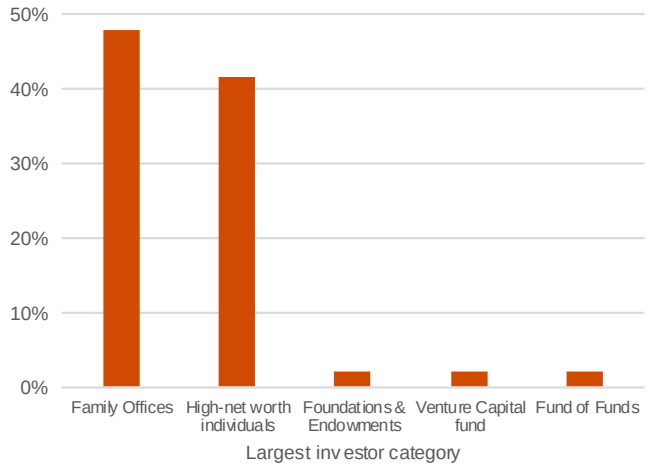


Taking our dataset as being representative of the total crypto fund universe, we can see that quant funds are the most prevalent and make up almost half of crypto hedge funds in the market today. The remaining strategies - discretionary long-only (19%), discretionary long/short (17%) and multi-strategy (17%) - are significantly smaller by comparison and together make up the other 50% of the crypto hedge fund market.

Market Analysis

This year we asked funds to categorise their investor base. Below we can see that the most common investor types (almost 90% of all investors) are either family offices (48%) or high-net worth individuals (42%). In fact, none of our respondents cited pensions funds and only a handful had foundations or endowments as investors. Somewhat surprisingly, we see that the share of investors that are Venture Capital (VC) funds and Fund of Funds (FoFs) is small by comparison.

Most common investors in crypto hedge funds

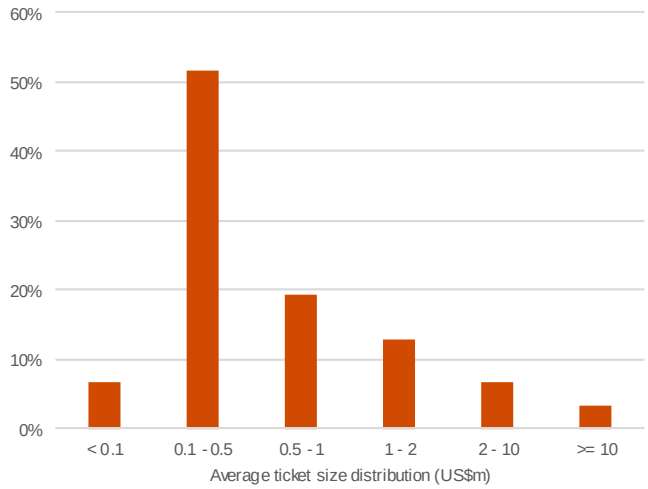


Number of investors in crypto hedge funds and average ticket size

	Average	Median
Number of investors	58.5	27.5
Average ticket size (US$m)	3.1	0.3

The median number of investors in funds is 27.5 and the average is 58.5, while the median ticket size is US$0.3 million and the average is US$3.1 million. The graph below shows the distribution of the average ticket size and suggests that almost two thirds of funds have tickets below US$0.5 million.

Investor ticket size - distribution of average



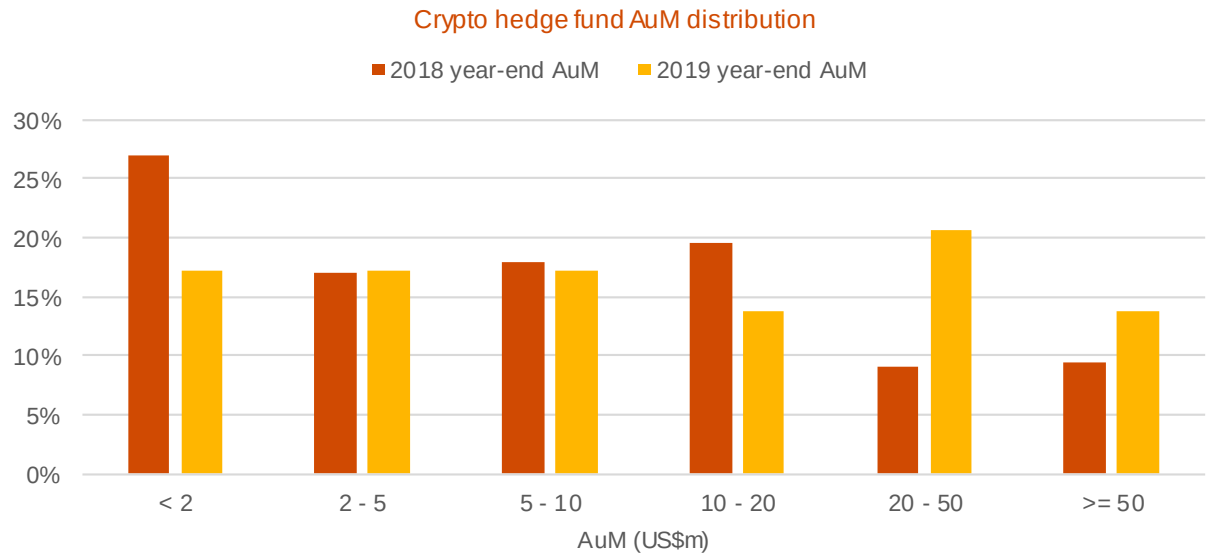
Assets Under Management

Average and median AuM of crypto hedge funds

	Average (US$m)	Median (US$m)
2019 year-end AuM	44.4	8.2
2018 year-end AuM	21.9	4.3
AuM level at launch	18.9	2.0

We estimate that the total AuM of crypto hedge funds globally increased in 2019 to over US$2 billion from US$1 billion the previous year.

The graph below shows the distribution of AuM held by individual crypto hedge funds. This is similar to the distribution for traditional hedge funds, where a few large funds manage the majority of assets, with a long tail of smaller funds.



The above graph shows us that the percentage of crypto hedge funds with an AuM of over US$20 million increased in 2019 from 19% to 35%. This is not surprising: funds with a larger AuM tend to attract not only new investors but larger ticket sizes, as many investors are restricted from representing more than 10% of AuM due to concentration risk.

Fund Performance

2019 year-end crypto hedge fund performance by strategy

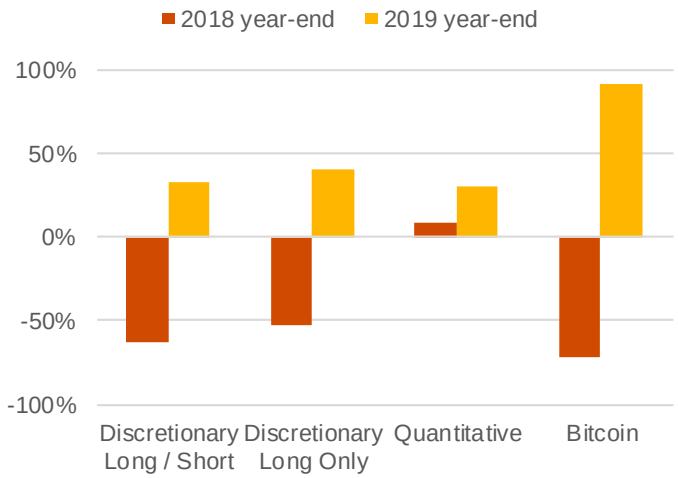
	Average	Median
Discretionary Long / Short	+33%	+33%
Discretionary Long Only	+42%	+40%
Multi-strategy	+19%	+15%
Quantitative	+58%	+30%

The table above shows a breakdown of the performance by investment strategy. The reported median 2019 year-end performance for the multi-strategy approach appears to be substantially lower (15%) than quantitative (30%), discretionary long / short (33%) and discretionary long only (40%).

Please note that multi-strategy performance is excluded from the table above as this strategy was not covered separately in 2019.

An interesting take-away from our survey is that there is significant survivorship bias. For example, the median crypto hedge fund performance was -46% in 2018. However, the median 2019 year-end performance of the funds that are included in this year's report is 74%. This provides very clear evidence that funds that significantly underperformed during the previous year had to shut down. This is particularly relevant when we consider the small AuM of crypto hedge funds: their average management fees (discussed further below in this report) are not enough for them to break even. This can only be achieved with strong performance fees.

2019 vs 2018 crypto hedge fund median performance by strategy



In the chart above, we compare performance by strategy rather than by fund to mitigate the survivorship bias caused by the funds that closed during 2018 and 2019. It is clear that Bitcoin (+92%) outperformed all hedge fund strategies in 2019. While these strategies were able to mitigate the effects of the 2018 crypto bear market, they did not succeed in replicating the upward trend of 2019. In summary, they acted as volatility-reducing tools rather than performance-enhancing catalysts.

Fees

Crypto hedge fund management and performance fees

	Average	Median
Management fees (%)	2.3	2.0
Performance fees (%)	21.1	20.0

Median fees were the same as in 2019: a 2% management fee with a 20% performance fee. However, we find that the average management fee increased (from 1.7% to 2.3%) but the average performance fee decreased (from 23.5% to 21.1%). We believe that most managers increased their management fees to help them cover their running costs, which have increased materially in recent years.

As crypto hedge funds seek to attract more institutional investors and other market participants, such as third-party custodians, they have become more regulated. The costs associated with complying to these stricter regulatory standards have also increased. We would expect these fees to gradually decrease over the coming years. As the industry matures it will become more competitive, offering more options for investors as institutional grade players enter the market.

Despite the slight increase in management fees, crypto funds will still find it challenging to break even, unless they are able to attract enough investors, keeping in mind that the median crypto hedge fund in 2019 had US$8.2 million in AuM.

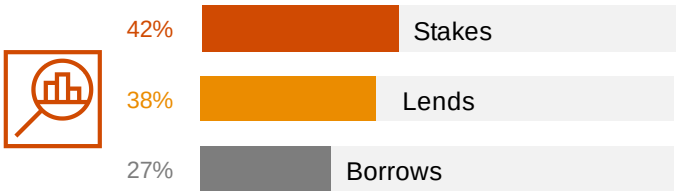
To illustrate this point, if the median crypto fund manages US$8.2 million and charges a 2% management fee, then they have US$164,000 in annual revenue. This is unlikely to be sufficient to sustain a business operation, especially considering that the median fund has a payroll with six employees. As a result, some funds are exploring ways to increase their income in order to cover costs. For example, we have seen quant funds diversify their approach and start market making, and early-stage focused funds take on advisory roles for new projects, while other funds seek to raise additional capital by selling stakes in their General Partner (GP). Some funds remain focused on their core strategy and hope to cover costs via the performance fee. While this approach can be seen as a positive, the downside is that managers may be inclined to take additional risks, especially towards year-end if they are still under their high water mark. The reality is that, at such low median AuMs, we expect a large number of existing crypto funds to shut down unless they are able to generate exceptionally high returns.

Cryptocurrencies

In this year's report, given the multifaceted nature of cryptocurrencies, we asked crypto funds how they are using Bitcoin and other cryptocurrencies other than for investment purposes.

The activities listed below were highlighted by the funds.

Percentage of crypto hedge funds involved in staking, lending and borrowing



Staking and lending, in particular, highlight how funds have increased their knowledge of specific crypto-related technologies in order to diversify their revenue streams.

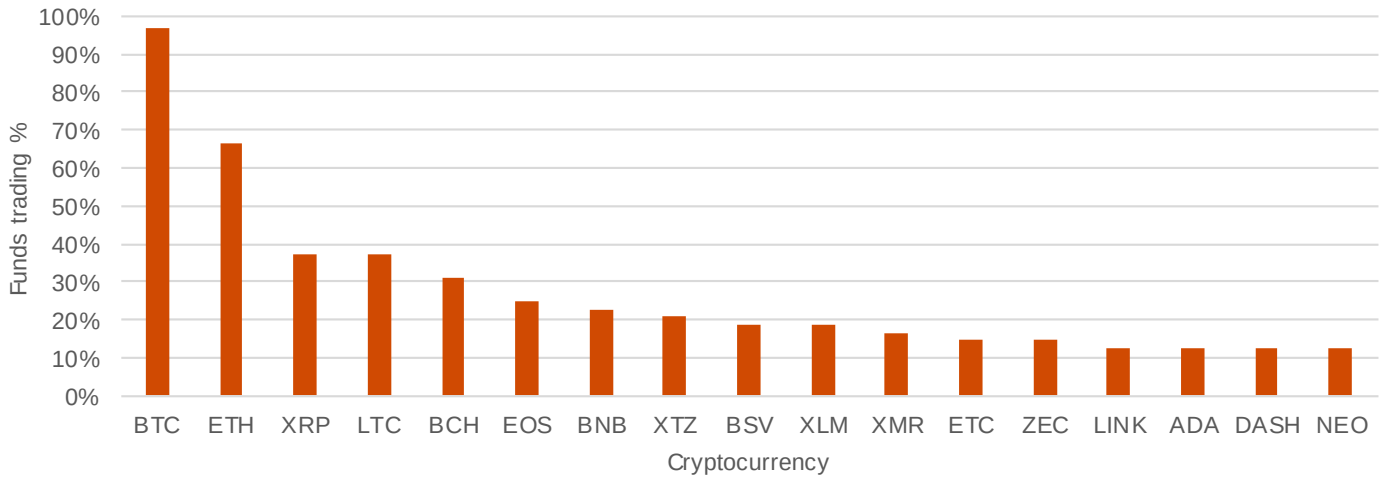
- Staking, baking, delegating and running master-nodes are yield-based strategies, but also contribute to the overall stability and robustness of the network. This is an important differentiation between crypto markets and capital markets. Moreover, running Proof-of-Stake (PoS) nodes requires engineers to setup and maintain a cloud and/or hardware configuration. Depending on their specific software requirements, different cryptocurrency projects may require very different configurations.
- Granting and monitoring a loan of crypto assets also require specific technologies and skills. Multiple managers may be required to authorize the transfer, and the flow of funds may be tracked on the public ledger. Again, engineers may be required to design and develop very specific tools to monitor all the individual steps involved in the loan process and to create interfaces between the firm's proprietary software and exchanges or other market participants.

The examples above explain why inputs from tech-savvy investment professionals are fundamental and why the Chief Technology Officer (CTO) is often actively involved.

When it comes to the percentage of a fund's daily trading activity attributed to BTC, almost half of all funds in our survey (49%) reported that at least half of their daily cryptocurrency trading volume is BTC, while only 5% of funds are pure Bitcoin funds and trade only BTC.

We also asked funds to name their top traded altcoins by daily volume (stablecoins were excluded) and we found that the top five altcoins traded the most by funds were: Ethereum (ETH, 67%), XRP (38%), Litecoin (LTC, 38%), Bitcoin Cash (BCH, 31%) and EOS (25%).
Although we did not ask funds to rank their top traded altcoins by market capitalization, it is interesting to note that Litecoin was mentioned by funds as one of their top traded altcoins despite its market cap being relatively smaller than the other mentioned altcoins. This also applies to ZCash and Ethereum Classic but to a lesser extent.

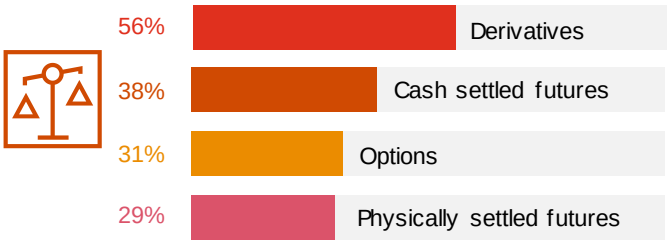
Cryptocurrencies traded by crypto hedge funds



Derivatives and Leverage

Crypto hedge funds and shorting

Crypto hedge funds and derivatives



Derivatives can either be used as hedging or alpha-generating instruments. Over the past year, we have seen further developments in the crypto lending market. For instance, many centralized and decentralized crypto exchange platforms are now providing lending and margin trading features to their customers. Therefore, flash loans and interest rate arbitrage are becoming more common.

These developments are also enabling funds to take short positions more easily as the derivatives market has become more diverse and more liquid. This means that crypto funds are more easily able to offer complex investment strategies such as market-neutral, as they have a more advanced toolkit at their disposal. It also means that we are seeing a closer correlation between investment strategies at crypto hedge funds and traditional hedge funds.

Our 2019 data supports this view, as almost half of the funds short crypto (48%) and over fifty percent (56%) actively use derivatives. Looking into the options and futures markets, about one third of funds use futures (either cash or physically settled) and options. The presence of regulated futures offerings should contribute to an increase of usage of such instruments over the coming years.

Crypto hedge funds and leverage

A different trend can be observed on the use of leverage. In the 2019 report, only 36% of the funds surveyed were allowed to use leverage. This year the figure has gone up to 56%, although only 19% of funds actively use it. Whilst we believe that more crypto hedge funds will be allowed to use leverage in their PPM, it still not clear that we should see a material increase in the coming years due to difficulties in obtaining debt financing by brokers (e.g. high collateral requirements, inherent risks) and the fact that many are able to get leveraged exposure by using derivatives.

Non-Investment Data

Team expertise

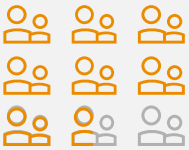
While the average size of investment teams has marginally increased from 7.5 to 8.7 people, the average years of investment management experience has doubled to 50 (from 24). This suggests that an increasing number of experienced investment professionals are entering the crypto space, leading to financially savvier crypto fund teams. But there may also be survivor bias. It is possible that the crypto funds that closed during the previous year had a higher proportion of junior staff, which could also explain the higher average experience in crypto fund teams in relation to 2019.

We expect to continue to see experienced finance professionals enter the crypto space as the industry evolves and matures. An investment team with 'traditional' asset management experience will likely give investors and regulators greater comfort that the fund is being managed in a professional and compliant manner.

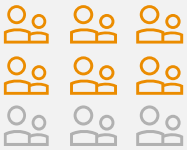
Experienced, non-investment professionals are also critical for the smooth running of the fund and its operational set-up. For example, a Chief Operating Officer (COO) or Head of Compliance with years of experience in the 'traditional' asset management world will be well-versed in applicable rules and regulations and the importance of investor protection. As previously mentioned, due to the particular nature of crypto assets, having a Chief Technology Officer (CTO) with a strong tech background is essential.

Change in crypto hedge fund average team size and cumulative years of investment management experience

2018



7.5
Average team size



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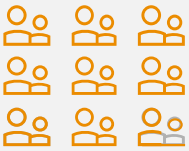
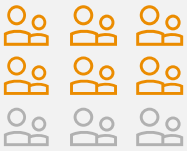
Median team size

2019



8.7
Average team size



6
Median team size

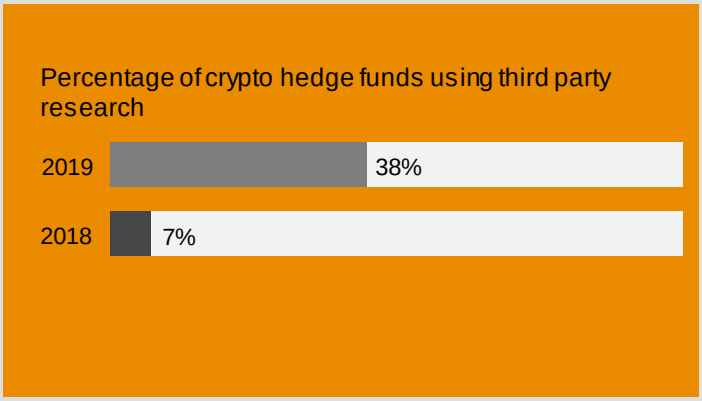
Cumulative years of investment management experience

	Average	Median
2018	24	20
2019	50	40

Cumulative years of team crypto/blockchain experience

	Average	Median
Cumulative years of team crypto/blockchain experience	16.0	14.5

This year, we also started tracking the cumulative years of blockchain/crypto experience within funds. The average is 16 years, but we expect this number to grow as individuals continue to gain more experience in this niche field and as funds increasingly seek to hire individuals with deep crypto and blockchain experience (e.g. researchers, consultants, engineers). This is likely to give them a competitive edge and a better understanding of a fast changing and complex market.



In 2019 our data showed that only 7% of the funds in our universe used third party research. Many funds relied heavily on proprietary valuation models. There was also a lack of dedicated crypto research providers in the market.

This year, our data shows a significant increase in the number of funds using third-party research. This may be due to a number of factors, such as the growing universe of crypto assets, making it challenging for in-house teams to cover the whole market themselves. Given the proliferation of dedicated crypto research providers offering targeted research and analysis, managers may find it more efficient to outsource certain parts of their due diligence process. They can then focus their attention and energy on specific areas of expertise where they have an edge and can generate alpha.

Custody and Counterparty Risk

Percentage of crypto hedge funds using an independent custodian

In the traditional fund management space, it is expected that funds use an independent third-party custodian. There are a large number of established players, from licensed custodians through to prime brokers, who can take custody of fund assets. This is not as straightforward in the crypto space, given the realities of public and private keys — which is why half of the crypto fund managers in our 2019 report said they used multi-signature wallets, hot/cold wallet set-ups or other innovative ways to hold the private keys of the fund's crypto assets. For funds using such a self-custody approach, having the in-house technology and expertise to design and monitor the self-custody set-up is also very important.

However, the crypto ecosystem has changed substantially and there are now a large number of crypto custodians that can service the industry.

So it should not be a surprise that, while our 2018 data showed that just over half the funds used an independent custodian, there was a significant increase this year. Over 80% of funds now use one or more independent custodians (either third party or exchange custodians).

This is not only due to institutional investor pressure and the continuous implementation of industry best practices, but also as fund managers are becoming increasingly regulated. These new regulations not only require funds to be stored in a safe environment (including with an independent custodian) but many jurisdictions also forbid a regulated fund manager from directly holding client assets.

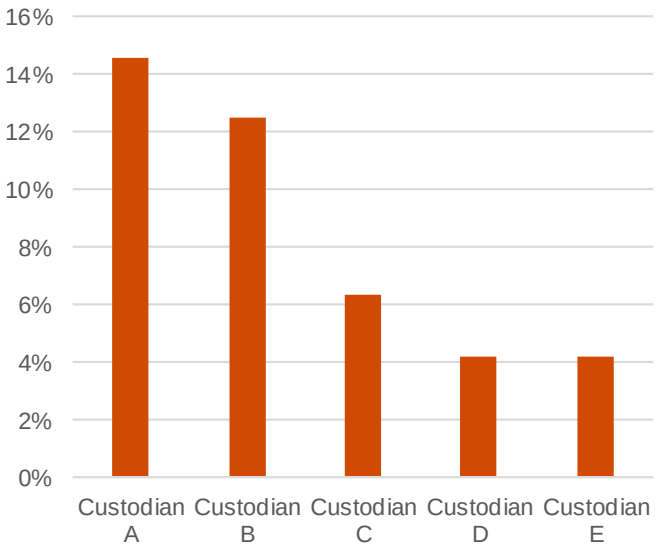
It is important to remember that almost half of the crypto hedge funds surveyed are quant funds. These traditionally leave their assets directly with the various exchanges as they trade continuously. Given the fact that 80% of funds report using an independent custodian, this implies that a large number of quant funds also use an independent custodian. However, for these quant funds, having a well-defined and enforced risk management policy is likely to be more important than having a custodian or not. Conducting regular counterparty risk assessments on these exchanges is also becoming important, as institutional investors will likely focus on this area as part of their operational due diligence. Demonstrating how the fund manager reacted to some of the big market events (e.g. the 12 March 2020 market crash) will also be key.

Given the relevance of these developments, it is interesting to take a look at the overall crypto custody landscape. From the chart below, we can see that there is no 'market leader' and that the industry is fragmented. Our data shows that the most frequently named custodian serves only 15% of the crypto hedge fund universe in our report. While this data weighs each fund equally (not factoring in AuM), we still consider it relevant as it shows how fragmented the custodian ecosystem is.

Some of the larger hedge funds will have more than one custodian. There are many reasons for this. Some do it for counterparty risk management reasons, especially considering the existing hacking risks in the industry. Others need a second custodian as their primary custodian may not custody all the assets they trade or may trade. Unfortunately, onboarding a second custodian is not always possible for smaller funds due to the minimum monthly fees that are added to the fund expenses, which could impact their net performance.

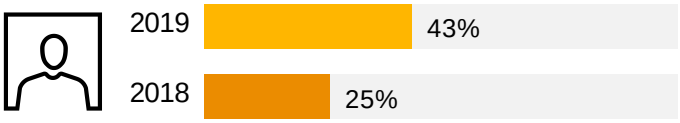
We also note that the vast majority of custodians used by funds are regulated or licensed in some form. This is a positive development for the industry and indicates the further institutionalization of the space. In addition, a handful of custodians also have System and Organization Controls (SOC) reports (or their ISAE 3402 equivalent), which are different from financial audits. These reports provide a level of transparency around financial reporting (SOC 1/ISAE 3402) and operational controls (SOC 2) and help to build customer trust in their risk management framework. We expect to see an increase in the number of custodians that obtain such public assurance reports. This should give comfort not only to investors in funds which use these custodians but also to the funds' service providers.

Most frequently used crypto custodians among crypto hedge funds



Governance

Percentage of crypto hedge funds with an independent director



Having independent directors on a fund board is critical, especially when decisions that may have an impact on investors need to be made, such as whether a side pocket needs to be set up to hold certain assets or whether restrictions need to be imposed on investor redemptions. In the crypto space, critical decisions are exacerbated by volatility issues and illiquid assets.

In the 2019 report, only 25% of funds had an independent director on their board. This year, our data shows that 43% of funds have one. Part of the reason is the general institutionalization of the industry and the de facto requirement by institutional investors to have independent directors on the boards of the funds they invest in. There is also a wider availability of board directors with relevant expertise and knowledge of the space. In the early years these were a rare commodity. But now, as the industry matures, there are more candidates to choose from. This trend is likely to have a positive impact on funds' ability to attract institutional investors and is another development that demonstrates how the industry is becoming more institutionalised.

Valuation and Fund Administration

Percentage of crypto hedge funds using an independent fund administrator

Last year we mentioned that an independently verified NAV is a crucial piece of information for fund auditors as well as investors, and that we expected to see more developments in this area. We are happy to see that over 86% of the crypto hedge funds in our report use an independent fund administrator.

It is very unlikely that institutional investors will select any fund without an independent administrator. While this was acceptable in the early days of the industry, there is no valid reason for a crypto hedge fund to calculate its own Net Asset Value (NAV) each month. We expect only a very restricted number of funds, such as those with small AuMs or who hold niche crypto assets, to be able to value part of their portfolio themselves.

Regardless of the choice of fund administrator, the valuation policy needs particular focus. Most funds will have their valuation methodologies and frameworks set out in the PPM. It is important for any fund to ensure that it complies with what is set out in its documentation. Management fees are determined based on NAV and performance fees are typically charged on NAV appreciation over a set period (e.g. above a 'high water mark').

Investors expect a monthly NAV to be available and verified by an independent, reputable fund administrator. Cryptocurrency exchanges can provide independent price quotes for certain crypto assets. But for those portfolios made up of less liquid crypto assets, managers may have to source a valuation from an independent third-party which satisfies the requirements set out in the PPM.

However, being able to accurately value a crypto fund remains challenging. This is particularly true for funds that hold illiquid tokens or crypto investments via SAFTs. There are also details that are important for funds trading some of the more liquid crypto assets, such as: the cut-off time for valuation (crypto markets operate 24 hours a day) or how many and which price sources to use (the same crypto asset may be priced differently at different exchanges globally). PwC's recent report on accounting considerations for crypto assets ('In depth: A look at current financial reporting issues') could be a useful guide.

Liquidity and Lock-ups

Not surprisingly, the liquidity and lock-up terms of the crypto hedge fund universe is largely similar to the previous year's. Quant funds provide the most liquid fund. Quant funds that generally trade very liquid exchange-listed crypto assets can easily provide better liquidity to investors than a fundamental investor targeting early-stage projects or a multi-strategy, where the fund manager needs to consider the various strategies and instruments in its portfolio.

One surprising takeaway is that we are seeing hard locks (where an investor is not allowed to redeem until the end of the lock-up period) and soft locks (where an investor is allowed to redeem early by paying a penalty) being used across the various fund strategies, with the majority of funds (65%) having one or the other.

Although hard locks are commonly used in situations where liquidity could be an issue, many liquid quant funds have similar terms. We believe that this is due mainly to the negotiating power of quant funds. Also, it may be that some funds were able to negotiate fee reductions via side letters in exchange for locking up their capital. As the industry matures and becomes more competitive, it will be interesting to see whether new crypto hedge fund vintages result in a change in the mix of fund terms that we see below.

We do not discuss fund liquidity overall, as each strategy is different and has its own liquidity constraints. We believe that such an analysis could be more interesting for gates.

Gates are a useful mechanism that allow fund directors to put in place restrictions in very limited circumstances, which limit the speed at which investors can redeem. The main purpose of a gate is not to protect the fund manager, but rather the remaining shareholders in the fund, so as to ensure that assets do not need to be liquidated in a fire sale solely to meet the large number of redemption requests.

Average crypto hedge fund redemption terms by strategy (2019)

Strategy	Redemption Frequency	Redemption notice (days)	Lock up (months)	Hard lock	Soft lock
Discretionary Long / Short	Quarterly	30-60	12	25%	38%
Discretionary Long Only	Monthly	30	18	56%	33%
Multi-strategy	Quarterly	30-60	12	50%	25%
Quantitative	Monthly	30-60	12	52%	30%

There are two main types of gates:

- Fund-level gates
  - Triggered only when redemptions are over a certain threshold of the fund (e.g. when over 25% of fund NAV or of total number of shares in issue at a particular redemption day).
  - Investors generally receive their redemptions on a pro-rata basis depending on the number of investors redeeming, but the total redemption amount is capped (e.g. at 25% of the NAV or total number of shares).
  - As there is no priority, the scaled-down redemption request will be treated on the next redemption day on a pro-rata basis with any new redemption requests.
- Investor-level gates
  - Always applied when an investor chooses to redeem (e.g. investors can only redeem 25% of their investment each redemption day regardless of whether other investors are redeeming at the same time).

Our data shows that the majority of crypto hedge funds have some sort of gate mechanism in place. Whether the industry will move towards investor level or fund level gates over the coming years is still unclear.

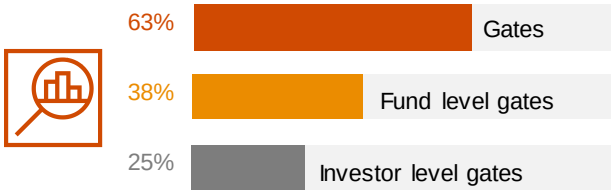
Fund-level gates may be seen as fairer, as they can only be triggered if a certain threshold of redemption requests on a particular redemption day is crossed. For example, if there is only one investor redeeming, with limited impact on the fund, then there is no reason for a gate to be imposed in the first place. The downside for an investor is that they cannot know whether their redemption request will be fulfilled, which may cause some cash management issues if the investor has their own liquidity requirements. Fund-level gates also put more pressure on the fund's board of directors, as they are responsible for deciding when to enact the gates.

Investor-level gates can be seen as somewhat favoring the fund manager at first glance, as the investor will never be able to redeem his capital in one go, but rather over a set number of months, during which time the fund manager will continue to collect fees. However, some investors prefer investor-level gates. Although they cannot redeem their full investment in one go, there is certainty as to what amount they will receive, which helps their cash flow management.

Generally speaking, investors are now comfortable with both gate mechanisms. In practice, the final decision as to which one to put in place is often made after consulting with the lead or Day 1 investor on their preference.

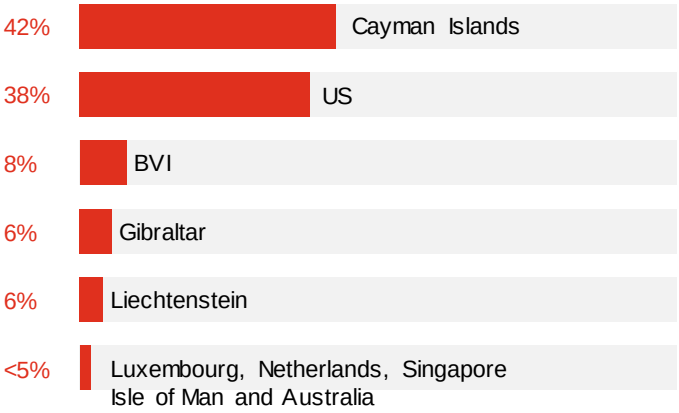
We will continue to track this data over the coming years.

Percentage of crypto hedge funds with redemption gates

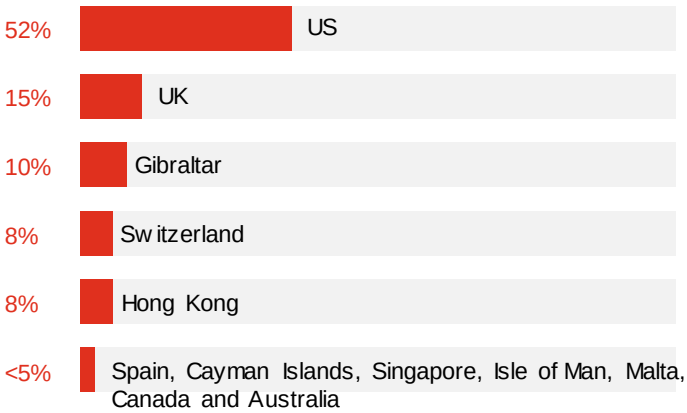


Legal and Regulatory

Top Crypto Hedge Fund Domiciles



Top Crypto Hedge Fund Manager Locations



When it comes to the jurisdiction of the fund, we do not see any major changes to our data compared to 2019. The Cayman Islands and the British Virgin Islands remain the preferred offshore jurisdictions and the United States the preferred onshore jurisdiction.

Our data in 2019 showed that the Cayman Islands was the second jurisdiction in terms of number of crypto hedge fund managers after the United States. However, we believe that the data did not show the full picture: despite the investment management entity being based in the Cayman Islands, very few of the managers were physically based there.

For this reason, we have changed how we gather our data this year and instead look at where the investment team is physically located. Using this new approach, our data shows that two thirds of crypto hedge fund managers are located in the United States and the United Kingdom - two existing financial centres with a large number of traditional hedge fund managers. Significant numbers of fund managers are also located in Gibraltar, Switzerland and Hong Kong.

Once again, this data is not surprising and we would expect it to remain mostly constant unless we see particular governments or authorities come up with policies to try and attract such fund managers to their jurisdictions.

Tax

A crypto hedge fund and its manager need to consider many of the same multi-jurisdictional tax issues that a regular hedge fund and fund manager would face. These include:

- Choice of fund structure and ensuring that the fund/feeder(s) are set up to be attractive to investors with different tax attributes;
- Assessment of whether the fund is trading or investing for tax purposes;
- Understanding the capital gains and withholding tax implications of different trades (if any);
- Structuring the performance fees/carry structure used to incentivise key staff of the manager;
- Dealing with transfer pricing between any connected entities responsible for managing the fund; and
- Managing investor tax reporting as well as CRS/FATCA.

However, there are a number of areas where crypto funds have unique tax issues. These include:

- **Treatment of cryptocurrency investments** – The characterisation of the income/gains derived from the fund's crypto investments could depend on whether the investments are treated as securities, commodities, or other property for tax purposes.
- **Different and unique sources of income / gains** - As highlighted in this report, crypto hedge funds can have a variety of sources of income that may require special consideration from a tax perspective (e.g. staking income from running proof of stake nodes, mining income, token rewards, coin-lending and tokens received from hard forks or airdrops). These sources of income / gains can often have unintended tax consequences. For example, if income from staking/rewards is treated as services income the activities giving rise to the income may constitute a trade or business or permanent establishment of the fund. For example, if such activities took place in the US, then non-US investors in the fund may be subject to US tax and the fund may have withholding obligations. The fund will also likely lose its ability to be considered for electing investment partnership status.
- **Do loss limitation regimes apply to crypto fund trades?** - For example, the wash sale or straddle rules in the United States. Wash sale rules applies to a sale or other disposition of "shares of stock or securities" while straddle rules apply to losses with respect to offsetting positions with respect to "personal property that is actively traded". Each crypto asset should be analysed separately.
- **Are mark-to-market elections available** (such as the mark-to-market regime in the United States which means that all gain or losses are ordinary in character)? In general, a trader in securities or commodities may make a mark to market election with respect to "securities" or "commodities" held in connection with its trade or business of trading. Again each crypto asset should be analysed separately.
- **Availability of fund tax safe-harbors** - If the fund is established in a different jurisdiction to the fund manager, then detailed consideration will need to be given as to whether the activities of the investment team could result in tax obligations arising for the fund. Many jurisdictions have safe harbors in place to prevent funds from suffering tax in the location of the investment team. In many cases, these exemptions were written into law prior to the advent of digital assets and therefore there is significant uncertainty as to whether many safe-harbor regimes or fund exemptions can be relied upon for crypto funds. For example, regimes such as the UK's investment manager exemption, Hong Kong's unified fund exemption and Singapore's offshore fund exemption include lists of qualifying investments. Many crypto assets (particularly payment tokens and utility tokens) do not qualify.

Because of these uncertainties, extra caution is needed, and there may be more uncertainty in many of the tax positions that crypto funds take on. As the market develops and becomes more institutional, managers should expect increased investor scrutiny on this topic.

Survey Respondents

List of Survey Respondents

Each respondent was asked to give consent to Elwood Asset Management and PwC for their firm name to be mentioned. Consenting participants are listed below in alphabetical order. If you are a crypto hedge fund manager that is not listed and you would like to participate in our next Crypto Hedge Fund report, please contact us at block@elwoodam.com

Alpha Sigma Capital
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Amber Group
Apollo Capital
Astronaut Capital
Attis Capital LLC
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Block Asset Management
BlockTower Capital
Bloomwater Capital
Blue Block Group
Cambrian Asset Management
CMCC Global
Coincident Capital
CryptAM Capital
Crypto Consulting AG
Crypto Fund AG
Cyber Capital B.V.
DBL Digital
DCAP Capital
Digico Capital Advisors
Digital Asset Capital Management
Digital Asset Risk Management Advisors (DARMA Capital)

Galois Capital
Hilbert Capital
Hyperion Decimus, LLC
Incrementum AG
KR1 plc
L1 Digital
Nickel Digital
North Block Capital
ODIN88 Asset Management, LLC
Off the Chain Capital
Panxora Management Corporation
Plutus21 Capital
Prime Factor Capital
Quantia Capital
Sigil Limited
Silver 8 Capital, LLC
Strix Leviathan
Systematic Alpha
Tensoralpha
Typhon Capital Management
Virgil Capital
Walden Bridge Capital

About PwC

About PwC:

At PwC, our purpose is to build trust in society and solve important problems. We are a network of firms in 158 countries with more than 250,000 people who are committed to delivering quality in assurance, advisory and tax services.

The PwC Global Crypto team is composed of over 150 professionals active in over 25 countries that offer a “one stop shop” solution for our crypto clients across our multiple lines of service. Our clients range from crypto exchanges, crypto funds, crypto investors, token issuers, traditional financial institutions as well as national regulators and central banks with regards to their crypto policies.

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About Elwood

About Elwood:

Elwood is an investment firm established in 2018 which specialises in digital assets. The team at Elwood combines an institutional heritage in finance with a deep knowledge of blockchain technology to create breakthrough products for global investors.

In March 2019 Elwood launched its first product, the Elwood Blockchain Global Equity Index, which offers investors exposure to the growth in the blockchain ecosystem via a highly liquid and regulated vehicle. Find out more at www.elwoodam.com

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