HexTrust

Family Offices:

Navigating Digital Assets & the Decentralized Economy

Hex Trust Insights

August 2022

1. Introduction

2021 has been a transformative year for the cryptocurrency industry. For years, the industry was dominated by retail investors, but that began to change as institutions started to adopt cryptocurrencies. A recent survey by Bitstamp found that 80% of institutions expect decentralized finance to overtake traditional investment vehicles within a decade. This shift could have a major impact on the industry, including the way prices are determined and how new projects are funded. While the industry is still in relatively early stages, the adoption by institutions is a sign of its maturity and potential. Despite the recorded bullish run of the crypto market that reached a peak of almost $3 trillion in November 2021, the industry has been in a downturn ever since. However, with more institutional involvement, 2021 could be remembered as a turning point for the cryptocurrency industry.

The Covid-19 pandemic has had a significant impact on the economy, and this is likely to continue in the short to medium term. Record-low bond yields and high inflation rates are just two of the consequences of the pandemic, and these have led to many investors moving their assets into safer havens. This has resulted in large amounts of capital flowing out of the crypto industry, which is understandable given the current climate of uncertainty. However, this downturn may actually be beneficial for the industry in the long term. Unsustainable projects are likely to be forced out of the market, and serious players will have to improve their processes and strategies in order to survive. The result will be a more efficient and resilient industry that is better equipped to weather future storms.

Bitcoin, the largest cryptocurrency by market capitalization, surged to new highs in November 2021, reaching a peak of $68,000. Despite the recent fluctuation in prices, Bitcoin remains a highly popular investment option due to its limited supply. There will only ever be 21 million Bitcoins in existence, and the halving protocol ensures that the rate at which new Bitcoins are created will continue to decrease over time. This makes Bitcoin a valuable asset with strong potential for future growth. In addition to Bitcoin, other major cryptocurrencies have emerged in recent years. Ethereum is the second-largest cryptocurrency by market capitalization and offers a fundamentally different experience than Bitcoin. Ethereum's consensus mechanism allows for decentralized applications (DApps)[1] to interact with smart contracts[2] programmed on the blockchain. This provides an enormous range of possibilities for developers looking to build innovative and disruptive applications. With its growing popularity and utility, Ethereum is poised to become a major force in the cryptocurrency space.

The institutional cryptocurrency adoption has further established digital assets as a new asset class. In the previous 8 years, cryptocurrencies have largely outperformed traditional asset classes and have been an excellent tool for diversifying portfolios. 81 Percent of the family offices that invest in cryptocurrencies, only allocate 3% of their portfolio to digital assets. Research shows that their Sharpe ratio will increase by approximately 20% if 5% is allocated to the emerging asset class. The benefits of cryptocurrency investment are clear. However, many investors are still hesitant to put more than a few percent of their portfolio into digital assets. This is understandable given the volatile nature of the market. However, with proper risk management strategies in place, investing a larger portion of your portfolio in cryptocurrencies can be a smart move that pays off in the long run.

In recent years, there has been a growing trend among family offices to invest in cryptocurrencies. While there are many different motivations for this shift, one of the most commonly cited reasons is the belief that DeFi (decentralized finance) has enormous potential. In fact, according to a recent survey, nearly 53% of family office investors said that they had purchased cryptocurrencies in order to gain a better understanding of the technology.

This report aims to provide an overview of the blockchain ecosystem and highlight some of the available investment opportunities. It also includes guidance on how family offices can allocate their portfolios and how to ensure safe and secure custodial ownership of digital assets. By increasing awareness and understanding among family offices, it is hoped that more institutional investors will be drawn to the blockchain space, leading to greater innovation and adoption.

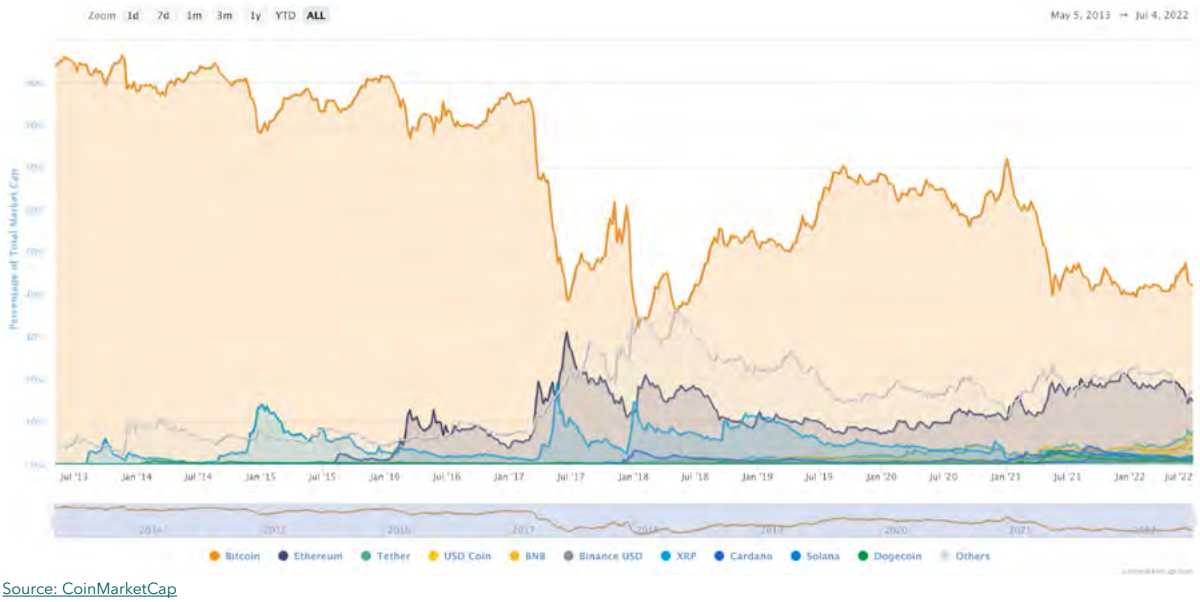
[1] Decentralized Applications (DApps) are applications that run autonomously on blockchains through smart contracts.

[2] Smart Contracts are automatically executed contracts if predetermined conditions are met.

2. Understanding the Blockchain Ecosystem

A blockchain is a distributed database that is used to securely store data in a transparent and immutable manner. The data stored on a blockchain can be anything of value, such as digital assets, medical records, or voting data. A key feature of blockchains is that they are decentralized, meaning that they are not controlled by any single entity. This decentralized nature

Major Cryptoassets By Percentage of Total Market Capitalization
(Bitcoin Dominance Chart)



Source: CoinMarketCap

makes blockchains highly resistant to censorship and manipulation. Blockchains are often divided into two categories: layer 1 and layer 2. A layer 1 blockchain is the fundamental network on which a layer 2 can be built. Layer 1 blockchains are typically much larger and more complex than layer 2 blockchains, as they provide the base infrastructure for a given crypto ecosystem. Bitcoin, Ethereum, Cardano, Solana, BNB, and XRP are the largest layer 1 blockchains by market capitalization. While Bitcoin used to be the dominant player in the market until the beginning of 2017, it recorded a steep decrease in market share due to the emergence of new blockchains.

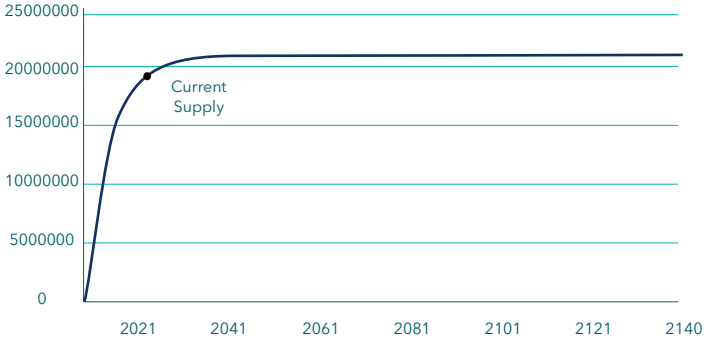
Ethereum is the second-largest blockchain with a 20% market share. Like Bitcoin, it is a layer 1 protocol, but it uses different consensus mechanisms. Bitcoin uses Proof-of-Work (PoW), while Ethereum is switching to Proof-of-Stake (PoS). PoW requires miners to solve complex computational puzzles in order to validate transactions and add blocks to the blockchain. PoS does not require mining, and instead Elected Validators stake their cryptocurrencies to earn rewards for validating transactions.

2.1. Bitcoin as a Store of Monetary Value

In 2009, Satoshi Nakamoto, a pseudonymous person or group, launched the first cryptocurrency, Bitcoin, which operated on a Proof-of-Work consensus mechanism. To validate blocks containing transactions, miners use sizable computational power on the blockchain to solve a mathematical puzzle in return for a predetermined amount of Bitcoins. The challenge was designed to be complex, and as a result, only miners who had invested a large amount of resources were able to solve it. By investing in resources, miners were essentially taking on a risk in the hopes of being rewarded for their efforts. This system allowed Bitcoin to function without the need for a central authority while still maintaining security and preventing fraudulent activity.

Bitcoin is the largest cryptocurrency operating on a Proof-of-Work consensus mechanism. Even though it is criticized for its environmental impact due to energy intensiveness, it remains the largest cryptocurrency by market share. Its monetary policy and the limited supply of 21 million tokens make Bitcoin a good investment opportunity. Due to a condition set in its protocol, after each set of 210,000 blocks mined, roughly every 4 years, the reward for validating a new block is halved. Consequently, every 4 years, the amount of new bitcoins released is cut in half, in other words, cutting the inflation rate in half. Currently, 19,0740,000 have been mined and in 2140, the last Bitcoin will be mined. The token's monetary policy enforces scarcity, leading to higher prices. By owning a part of Bitcoin, you own a piece of digital gold that cannot be printed by anyone making it an excellent hedge against inflation. Furthermore, being the first and most established cryptocurrency gives Bitcoin a first-mover advantage leading to more adoption and a larger network effect compared to its competition. All these properties result in Bitcoin being a sound investment despite its volatile price.

Forecasted Bitcoin Supply



Source: bitcoinvisuals.com

2.2. Ethereum: the First Smart Contract Blockchain

Ethereum is the second-largest layer 1 protocol by market capitalization and is fundamentally different from Bitcoin. While Ethereum used to operate under the Proof-of-Work consensus mechanism, it has been running a Proof-of-Stake consensus mechanism parallelly to expand scalability and reduce its environmental impact. Soon, Ethereum will complete its transition to the Proof-of-Stake protocol.

Contrary to the mathematical puzzles on the PoW, validators put their cryptocurrency as collateral to validate transactions in return for a reward. In case of falsely validating a transaction, your collateral will be taken away as a penalty. The main benefit of this system is that it renders mining rigs obsolete, making it more accessible and democratic (anyone with a computer can stake coins). Furthermore, it requires less energy than PoW, which greatly reduces its carbon footprint. Critics argue that this system is vulnerable to rich people controlling the network since they would have a majority of the stake. However, Ethereum has implemented several mechanisms to prevent this from happening, such as capping the amount anyone can stake and randomly assigning validators.

Ethereum's cryptocurrency token, Ether, serves as a reward for validators verifying transactions on the Ethereum blockchain. Ether is different from Bitcoin in a few key ways. For one, Ether is not capped at a fixed supply like Bitcoin is. This means that there is no predetermined limit on the amount of Ether that can be mined. Additionally, Ethereum's protocol cannot rely on expected price increases due to halvings like Bitcoin's protocol can. However, Ether's price is still expected to increase due to the expansion of the DApps ecosystem. In order to participate in the Ethereum blockchain, it is necessary to pay Ether. For example, when a user wants to create a smart contract on the Ethereum blockchain, they must first pay a gas fee[3] in Ether. The amount of Ether needed to pay the transaction fee varies depending on the complexity of the smart contract. However, as more and more users begin to use Ethereum's network, it is likely that the price of Ether will continue to increase.

Ethereum is the first smart contract blockchain that runs contracts exactly as programmed and eliminates any intermediaries and vulnerabilities to fraud. Ethereum is used to build a variety of DApps with a broad range of functions, from intelligent contracts and surety obligations to financial services, gambling, and many other potential applications. Ethereum's protocol is designed in such a way that developers can create DApps on the blockchain, which are supported by smart contracts. These capabilities give rise to innovative and disruptive projects that compete with traditional financial services such as trading and lending. Innovative projects such as stablecoins[4] and Decentralized Autonomous Organizations (DAOs)[5] have also gained popularity among developers. In addition to offering a store of value, Ethereum also provides a platform for innovation and disruption.

The creation of Non-Fungible Tokens (NFTs)[6] was a big step in asset management. NFTs have a unique identification code, which makes them easy to track and difficult to counterfeit. They can represent real-world items like artwork or real estate, and their ownership can be verified via the distributed ledger. NFTs can be traded or exchanged just like cryptocurrencies, and their value is determined by market demand. The most expensive NFT to date was sold for 91.8 million dollars in December 2021. It contained an artwork called "The Merge." The programmability of smart contracts has revolutionized the way we manage assets, and NFTs are at the forefront of this new economy. An economy Hex Trust is greatly participating in. In March 2021, Hex Trust became the first licensed institutional custodian to offer custody services for NFTs.

[3] A gas fee is the fee users of the Ethereum blockchain pay as compensation for computing energy needed to validate transactions.

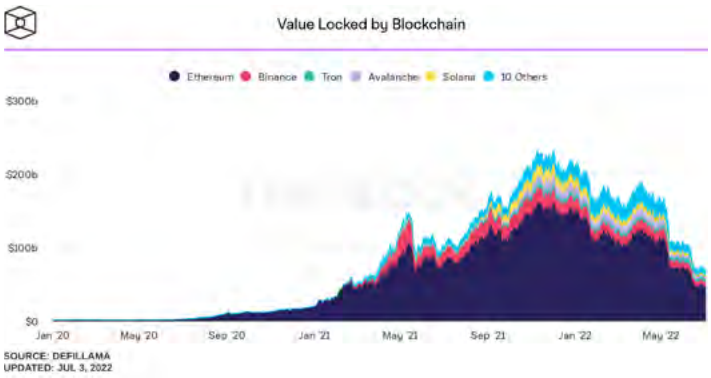
[4] Stablecoins are a type of cryptocurrencies that are pegged to a stable asset, such as gold or the U.S. dollar. The goal of a stablecoin is to provide a more stable and predictable price than other cryptocurrencies, which can be notoriously volatile.

[5] Decentralized Autonomous Organizations (DAOs) are a type of computerized entities that run on a set of predetermined rules with no central authority figure. DAOs could provide a higher degree of transparency than traditional organizations, as all transactions would be recorded on a public ledger.

[6] Non-Fungible Tokens (NFTs) are a type of digital assets that are unique and therefore not interchangeable.



The total value locked in DApps reached its peak of 250$ billion at the end of November 2021, and has seen a similar downward trend as the cryptocurrency market ever since. Currently, the total value locked up is worth approximately 75$ billion. DApps have enabled innovative applications and projects to emerge. Dexes, decentralized exchanges for peer-to-peer transactions, have been the largest application by market size, followed by financial services such as lending and staking.



Since the rise of DApps, Ethereum has seen new blockchains entering the market. Even though it remains by far the largest PoS blockchain, it has seen substantial market share disappear to newer blockchains. Binance, Tron and Solana are currently the main competitors. The crypto market has been maturing and pushing unsustainable projects out of the market. Ultimately, this process of creative destruction is essential for the development of a healthy and vibrant crypto ecosystem.

3. Why Invest in Digital Assets?

3.1. Institutional Adoption as Driving Force behind the Development of the Blockchain Ecosystem

The blockchain industry has experienced a massive bull run in 2021. According to CoinShares data, institutions increased crypto investments by nearly 36%, from $6.8 to $9.3 billion, illustrating the increased institutional adoption. Bitstamp, a crypto exchange platform, strengthens this by a published survey conducted in the first quarter of 2022. It found that 80% of institutional investors expect crypto to overtake traditional investment vehicles within a decade. The underlying principles driving this institutional investment are blockchain's infrastructure and ability to provide security, transparency and trustlessness[7] in transactions as well as its potential to generate high returns. In particular, compared to the traditional financial system, blockchain technology can help reduce counterparty risk and costs related to middlemen such as banks and brokers. This can result in improved trade settlement times, lower fees and enhanced security from fraud or theft. As more institutional investors enter the digital asset space, it is likely that we will see even more bullish momentum for the blockchain industry.

Examples:

- Goldman Sachs introduced the first Bitcoin-backed loans where the digital currency is used as collateral for a cash loan.
- Morgan Stanley was the first large U.S. bank that allowed wealthy investors to access Bitcoin funds.
- Tesla bought 1.5$ billion worth of Bitcoin at the beginning of 2021.
- Mastercard, Visa and Paypal offer transaction services for cryptocurrencies.
- The Central African Republic and El Salvador adopted Bitcoin as currency.

3.2 Low Asset Valuations Lead to Investment Opportunities

The market capitalization of Bitcoin reached its peak in November 2021 before experiencing a sharp decline. However, this decline also presents an opportunity for investors. The graph below shows the market capitalization of Bitcoin on a logarithmic scale, which allows us to assess general market trends while compensating for its high volatility. Over the long term, Bitcoin has experienced an upward trend. Furthermore, there is a pattern of reaching a peak every 4 years, followed by a recovery period of approximately 1 to 2 years. Currently, Bitcoin is in the recovery period following its previous peak in November 2021. Thus, although the market capitalization of Bitcoin is currently lower than it was at its peak, the long-term trend suggests that it will eventually recover and reach new highs. Consequently, this provides an opportunity for investors to purchase Bitcoin at a lower price and potentially benefit from its future appreciation.

Logarithmic Market Capitalization Bitcoin



Source: blockchain.com

3.3. Cryptocurrencies as Unique Diversification Tools

Diversification is a well-established investment strategy to hedge against asset classes that react similarly to the same event. The fact that largely uncorrelated risk premiums uniquely characterize cryptocurrencies as opposed to other asset classes is what makes them an effective diversification tool. Table 1 shows that Bitcoin and Ethereum are largely uncorrelated to the other asset classes as their values range from -0.04 to 0.15. Compared to another diversification tool, gold has correlation values ranging from -0.02 to 0.34. Another interesting feature of this table is the correlation between these two diversification tools. Gold is largely uncorrelated to Ethereum (0.07) and Bitcoin (0.08), supporting the view of cryptocurrencies as a unique diversifier. Cryptocurrencies offer a new and innovative way to diversify one's portfolio, and they should be given serious consideration as a valuable addition to any investment strategy.

[7] Trustlessness within the blockchain ecosystem means that investors do not solely rely on a single intermediary or institution for the functioning of a network.

Table 1: Asset Correlation Matrix: 31/12/2014 - 31/3/2022

Correlation	US Equity	Developed Equity	Emerging Equity	US Bond	US Long Term Treasury	Real Estate	Gold	Bitcoin	Ethereum
US Equity	1.00	0.87	0.78	-0.01	-0.36	0.75	-0.02	0.15	0.11
Developed Equity	0.87	1.00	0.84	0.02	-0.35	0.66	0.03	0.15	0.11
Emerging Equity	0.78	0.84	1.00	0.04	-0.26	0.56	0.08	0.13	0.10
US Bond	-0.01	0.02	0.04	1.00	0.78	0.17	0.34	0.05	0.05
US Long Term Treasury	-0.36	-0.35	-0.26	0.78	1.00	-0.14	0.31	-0.04	-0.01
Real Estate	0.75	0.66	0.56	0.17	-0.14	1.00	0.09	0.11	0.07
Gold	-0.02	0.03	0.08	0.34	0.31	0.09	1.00	0.07	0.08
Bitcoin	0.15	0.15	0.13	0.05	-0.04	0.11	0.07	1.00	0.51
Ethereum	0.11	0.11	0.10	0.05	-0.01	0.07	0.08	0.51	1.00

Source: 21Shares, State Of Crypto, Issue 6

3.4. Improved Sharpe ratio with Cryptocurrency Allocation of 5% to Investment Portfolios

UBS recently conducted a survey of family offices and found that 35% of them are investing or considering investing in cryptocurrencies. Of those, 81% allocate 3% of their portfolio to digital assets, while the remaining devote 4 to 10% to crypto. While this represents a significant amount of interest from the family office space, it's worth noting that actual allocations are still relatively small. This is likely due to the fact that cryptocurrencies are still considered to be a risky asset class by many institutional investors. However, there is growing evidence that adding a small allocation to crypto can help to improve the risk/return profile of a portfolio. For example, a recent study by ICONIC Funds Research between 2013 and 2021 showed that adding crypto to a traditional family office portfolio can increase annualized returns from 3.6% with no crypto allocation to 7.6% (5% rebalancing). As more and more family offices begin to consider crypto as a viable investment option, it's likely that we'll see a further shift towards larger allocations.

The crypto index used to investigate the impact of 1, 3 and 5% monthly rebalancing is a weighted index based on the 10 largest cryptocurrencies in the market, consequently, dominated by Bitcoin and Ethereum. When an investor wants to construct and maintain its portfolio, rebalancing is essential to ease significant fluctuations in asset classes. This is illustrated in table 2, that shows the realized annual returns by asset class. Besides the fact that cryptocurrencies have been mainly outperforming the traditional asset classes, Bitcoin and Ethereum suffer from great volatility. 21Shares found that the Sharpe ratio of a portfolio without rebalancing is performing worse than a portfolio without any allocations to Bitcoin. Therefore, an investor should seriously consider rebalancing its portfolio on a monthly basis to ensure the best possible performance.

While there is no doubt that Bitcoin has been the star of the cryptocurrency show in recent years, new research suggests that other digital assets may also have a place in a well-diversified portfolio. ICONIC Funds, a family office investing firm, found that when they allocated 5% of their portfolio to cryptocurrencies, the Sharpe ratio increased from 5.0684 to 5.9859 – a rise of almost 20% compared to the current allocation of 3%. Further research from 21Shares (2022) has also assessed the optimal allocation among cryptocurrencies and found that including 5% of the cryptocurrencies with the largest market capitalization provides a better risk-return compared to a portfolio with solely Bitcoin as a diversification cryptocurrency. This suggests that for investors looking to maximize returns while minimizing risk, a diversified approach to digital assets is the way to go.

Approximation of the average family office portfolio

Index	Weight
Equities	55%
Bonds	20%
Commodities	3.0%
Real Estate	4%
Private Equity	3%
Cash	15%

3.5. Staking as an Alternative to Low-Performing Treasury Bills

While treasury bills have long been the safe haven for investors to earn steady interest rates, macroeconomic shocks, followed by extensive fiscal and monetary interventions, resulted in increased inflation. As the current real yields of five- and ten-year US treasury bonds are negative, investors must consider alternatives to earn low-risk returns.

Besides value creation through the trading of digital assets, investors can earn passive income by staking their cryptocurrencies. When investors stake their digital assets in the digital asset ecosystem, it is

Table 2: Sharpe Ratios and Annualized Returns of different crypto allocations in Family Offices' portfolios

	Family Offices			
	Reference Index	1% Rebalancing	3% Rebalancing	5% Rebalancing
Sharpe Ratio	3.4459	4.0152	5.0684	5.9859
Annualized Return	3.6%	4.4%	6.0%	7.6%

Source: Iconic Funds

Table 3: Annualized returns by asset class

	US Equity	Developed Equity	Emerging Equity	US Bond	US Long Term Treasury	Real Estate	Gold	Bitcoin	Ethereum
2015	1%	-1%	-16%	0%	-2%	2%	-11%	36%	35%
2016	12%	1%	11%	2%	1%	9%	8%	121%	784%
2017	22%	25%	37%	4%	9%	5%	13%	1394%	8770%
2018	-4%	-14%	-15%	0%	-2%	-6%	-2%	-74%	-82%
2019	31%	22%	18%	8%	14%	29%	18%	92%	-3%
2020	18%	8%	17%	7%	18%	-5%	25%	304%	474%
2021	29%	11%	-4%	-2%	-5%	41%	-4%	60%	399%
2022	-5%	-6%	-8%	-6%	-11%	-6%	6%	-1%	-11%

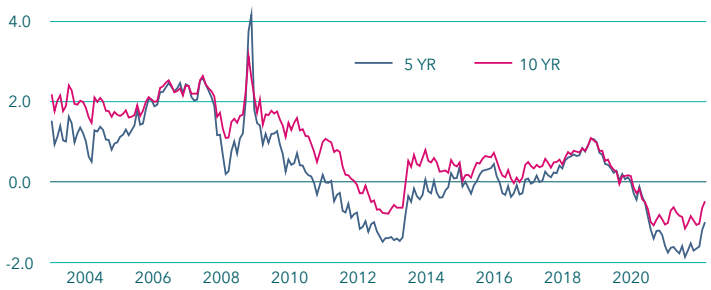
Source: 21Shares, State Of Crypto, Issue 6

used as collateral for validation transactions on the blockchain. In return, investors receive a yield usually higher than the interest rate given at traditional banks. However, if false transactions are validated, investors lose their collateral. This serves as an incentive to maintain and secure the blockchain. To avoid this, Hex Trust only partners with the best-in-class staking providers.

Blockchains that operate on a Proof-of-Stake consensus mechanism allow for an alternative to those negative real yields from US treasury bills. For example, Ethereum 2.0 offers a real yield of 4%. When compared to the negative real yield of 5- and ten-year US Treasury bills, it's easy to see how staking in Ethereum 2.0 could be a more profitable endeavor for risk-averse investors. Of course, there are risks associated with any investment, but with careful research and due diligence, investing in a blockchain project could offer a higher return than parking your money in US treasury bills..

Ethereum, Solano, Cardano and Polkadot are the largest cryptocurrencies available for staking, excluding Bitcoin, as it operates on a Proof-of-Work consensus mechanism. The table below provides an overview of the real yield of those staked cryptocurrencies. Overall, it concludes that staked cryptocurrencies provide high and positive real yields, in sharp contrast to U.S. treasury bills.

US Treasury Monthly Real Yield



Source: data.nasdaq.com

Table 4: Staking Yields of the Largest Cryptocurrencies

	Nominal Yield %	Inflation %	Real Yield %
ETH 2.0	4.4%	0.4%	4%
Cardano	4.6%	2.5%	2%
Solana	5.6%	4.3%	1.2%

Source: staked.us/yields

3.6. Earn Passive Income through Lending

Decentralized finance lending is a lending model where lending and borrowing platforms are powered by smart contracts on a blockchain protocol. Lenders can earn interest on their deposited assets, while borrowers can take out loans using their deposited assets as collateral.

This lending model has become popular in recent years due to the many advantages it offers over traditional lending models. First, decentralized finance lending platforms are often much more accessible than traditional lending platforms, as they are available 24/7 and can be used by anyone with an Internet connection. Second, decentralized finance lending platforms are often much more transparent than traditional lending platforms, as all loan terms and conditions are written into the smart contract and cannot be changed without the consent of all parties involved. Finally, decentralized finance lending platforms typically offer much higher interest rates than traditional lending platforms, making them an attractive option for both lenders and borrowers.

4. Global Crypto Regulations Expected Next Year

In recent months, the cryptocurrency industry has seen both extreme highs and lows. The bullish market in 2021, followed by a bearish trend has led to widespread panic among investors. These volatile swings have made it clear that the industry needs a more stable regulatory framework in order to attract further investment and encourage sustainable growth.

Currently, U.S. Generally Accepted Accounting Principles does not provide clear guidance for the accounting treatment of crypto assets. This lack of clarity has led many family offices to treat crypto assets as intangible assets with indefinite useful lives in fulfillment of ASC 350 Intangibles – Goodwill and Other. These assets are then subjected to an annual impairment assessment, depending on the circumstances that potentially signal that the asset is impaired. Consequently, the company must then write down the value of those assets. However, impairment for previously written-down assets cannot be reversed when the market price of the digital asset increases. In other words, a company cannot account for appreciation of the assets. Companies do, however, have the option to disclose information such as the current price at a certain exchange and the quantity of tokens of one digital asset held in order to provide an approximation of the value of the corporation's holdings. Despite not being the best option, this one does offer some transparency into the worth of a company's digital assets.

Currently, the Markets in Crypto Assets (MiCA) initiative is nearing agreement among representatives of important institutions in the European Union. This initiative seeks to enact union-wide regulations for the cryptocurrency business, and if successful, could set an important precedent for other regions like the United States and Asia. In March 2021, US President Joe Biden signed an executive order that committed the White House to undertaking cryptocurrency research and working with other government agencies to develop a regulatory framework for digital assets. This followed similar statements by other government officials in favor of blockchain technology, leading to speculation that China plans to become a leader in the digital currency area. However, there is no sign that China intends to lift or loosen its prohibition on cryptocurrencies anytime soon. China's central bank has been working for years to introduce an official digital currency, and in September 2021 it revealed that pilot tests of its e-CNY digital money had been completed in a number of cities. It remains to be seen how these developments will unfold, but it is clear that the global landscape of cryptocurrency is changing rapidly.

However, one potential obstacle to this initiative is the issue of taxes. Cryptocurrencies are currently subject to a variety of different tax regimes, and it is unclear how, for example, MiCA's regulations would fit into these existing frameworks. Without a clear consensus on this issue, it may be difficult to get all the parties involved to agree on a final set of regulations. Nevertheless, as the industry continues to evolve, it is clear that a global regulatory framework is needed and will be established soon to protect investors and promote sustainable growth.

5. How to Invest in Cryptocurrencies?

5.1. Exposure via Exchange Traded Products

Crypto-backed Exchange Traded Products (ETPs) have become increasingly popular in recent years as a way for investors to gain exposure to the crypto market without having to directly own any digital assets. While ETPs do have some advantages over other investment products, such as traditional mutual funds, they also come with several drawbacks. For one, ETPs typically have high management fees, which can eat into returns. Additionally, not all tokens are included in ETPs, so investors may miss out on gains from certain digital assets. Finally, by owning an ETP, investors forgo the opportunity to earn yield from activities like staking and lending their digital assets. As a result, investors need to carefully weigh the pros and cons of ETPs before deciding whether they are the right investment product for them.

5.2. Investing in Equity of Companies with Cryptocurrencies on the Balance Sheet

An indirect way of exposure to cryptocurrencies is buying equity in firms with digital assets on the balance sheet. However, investors must assess companies' balance sheets to evaluate the level of exposure. For instance, at the start of 2021, Tesla bought 1.5$ billion worth of Bitcoins, which were valued at almost 2$ billion at the end of 2022. While this is a massive investment in absolute value, to assess the exposure of investors buying equity in Tesla, this amount at the end of 2021 only contributes to 2% of the total assets, largely limiting the exposure to cryptocurrencies. Contrary to low exposure at Tesla, investors could buy equity in one of the largest cryptocurrency exchanges, Coinbase, which went public in april 2021.

5.3. Exposure via Direct Ownership

As the popularity of cryptocurrencies continues to grow, more and more investors are looking for ways to get involved. One option is to purchase crypto assets directly. This can be done through self-custody, where the investor controls the private keys to their own wallet, or through custodial ownership, where a third party holds the keys on the investor's behalf. While self-custody offers more control and flexibility, it also comes with greater security risks. For this reason, many retail investors prefer to use a custodian such as Hex Trust. Hex Trust offers state-of-the-art security systems to protect investors' digital assets, as well as support and guidance that self-custody does not. Furthermore, direct ownership is the only way for investors to stake and lend their cryptocurrencies. For these reasons,hex trust is the preferred choice for many institutional investors.

6. Hex Trust Offers Exposure in the Most Reliable and Secure Way

Our mission is to provide the infrastructure that enables banks and financial institutions to adopt and integrate digital assets into their business models within a highly secure, scalable and compliant custody framework. To meet today's needs of the innovating market and accelerate global institutional adoption, digital asset custodians have significantly evolved over the last decade. While initially the core business was safekeeping of digital assets, the business expanded to institutional-grade custody and infrastructure providers that not only secure assets under custody but also provide further connectivity for those custodied assets across DeFi, NFTs, Web3[8], and the metaverse.

6.1. Custody

Hex Trust provides institutional-grade custody, compliance frameworks, and state-of-the-art security solutions for the safekeeping of digital assets. Hex Trust carries comprehensive crime insurance to further safekeep client assets held across our storage systems. Through Hex Safe™, you have access to custody services purpose-built for banks, delivered in partnership with IBM.

[8] Web3 stands for World Wide Web based on Blockchain Technology.

6.2. Defi & Staking

The Hex Safe™ custody account allows you to connect to the industry's leading DeFi platforms to activate your idle digital assets. Furthermore, staking rewards from participation in transaction validation on Proof-of-Stake blockchains can be earned. We take care of generating offline wallets and key backups, you retain full ownership and receive rewards directly.

6.3. Brokerage and Trading

Leverage experienced traders combined with market-leading security across deep liquidity pools of global exchanges and OTC desks covering a wide range of digital assets. Acting as a dealer, we provide liquidity to our clients at all-inclusive prices. Choose between low-touch e-trading, high-tough OTC trading, or a combination of both depending on your needs.

6.4. Financing and Structured Solutions

Hex Trust provides high-touch tailored financing and structured solutions to meet your needs, and help navigate the digital asset landscape to find opportunities with the right risk/return profile. Access unique income products specifically designed for digital assets. Decentralized applications offer some of the best returns for participants. We provide easy and safe access to such protocols and guarantee a seamless experience from deposits to transactions and withdrawals. Secure integrations ensure you don't have to worry about onboarding to new platforms or dealing with any additional transactions and integrations yourself.

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Emmanuel is currently a Vice President for Hex Trust. He has experience as a client-facing strategist at PIMCO in London and as a manager of Finoa in Berlin. He also has previous experience as a risk analyst at BNP Paribas Fortis Brussels and as an analyst at UniCredit Hong Kong. He holds a master's degree in management from Imperial College London, as well as a MBA with a specialization in finance and risk management from KU Leuven, Belgium.



Hendrik Hellings

Intern Sales and Business Development at Hex Trust

Hendrik recently joined Hex Trust as a Sales and Business Development Intern, based in Berlin. He is currently finishing his Bachelor's degree in International Business, specializing in Emerging Markets, at Maastricht University. He also studied at Lancaster University and Paris Dauphine University.

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