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TOPICAL REPORT

Investing in bitcoin

Global Manager Research

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Key takeaways

- The digital asset ecosystem has taken several quantum leaps forward since the creation of bitcoin in 2009, and cryptocurrency is now widely considered a viable investable asset. Novel utilities associated with the technology have been discovered, the global cryptocurrency market capitalization has skyrocketed, and there have been marked changes in the quality of digital asset offerings and institutional participation.
- This topical report endeavors to first discuss the essential factors that investors should contemplate while seeking exposure to cryptocurrencies. It will then explore the various entities through which institutional investors may gain access to digital assets, while also highlighting the primary differentiators and drawbacks of each method.
- Without an exchange-traded fund (ETF) approved by the U.S. Securities and Exchange Commission (SEC), investors seeking exposure to digital assets may either make a direct purchase through a crypto exchange or gain indirect access via mutual fund derivatives, a grantor trust, or a private placement fund.

Principal criteria for investment

In weighing whether to make an investment in bitcoin directly, or through a registered fund that uses derivatives such as futures, a grantor trust, or a private placement vehicle, investors should keep a few considerations top of mind:

- Ability to closely track the price of the underlying asset
- Impact of premium / discount on investment outcome
- Protection against hacking/cyber-theft
- Fees and operating expenses
- Liquidity

Digital asset investment offerings

This segment of the report aims to analyze the various institutional cryptocurrency products mentioned above, with an emphasis on the first four principal criteria for investment. Liquidity, the fifth key component when evaluating such vehicles, will then be compared across the different methods in the following section.

Direct exposure

Coinbase's direct listing in April represented the first time a digital exchange went public in the U.S. Its market capitalization, which currently exceeds $59 billion (as of 9/30/2021) [1], underscores the disruptive potential of such platforms and illustrates investor appetite for the space. Investing directly in bitcoin through cryptocurrency exchanges provides investors with the purest form of ownership among the aforementioned mechanisms.

However, it also introduces numerous potential risks. Such exchanges have proven vulnerable to hacking and cyber-theft. For instance, between 2011 and 2014, 650,000[2] bitcoins were stolen from Mt. Gox, a Japanese cryptocurrency exchange that was then the largest in the world. More recently, hackers were able to withdraw over 7,000 bitcoins from Binance, currently the world's largest cryptocurrency exchange[3]. Such attacks highlight the importance of *cold* storage, discussed later in the report, and the susceptibility of digital exchanges to breaches.

Even when digital exchanges successfully evade hacks, investors can lose access to their cryptocurrencies if they do not properly store or remember the public and private keys associated with their wallet. Given the decentralized nature of the platforms and their cryptographic security features, password recovery infrastructure is often infeasible. According to *The New York Times*, around 20%[4] of the existing bitcoin supply appears to be lost or otherwise stranded in wallets. Further exacerbating this risk, many platforms either have very limited or entirely nonexistent customer service capabilities -- delaying responses in the event of crises. For example, the Federal Trade Commission and Consumer Financial Protection Bureau have received 11,000 customer complaints against Coinbase since 2016, the majority of which relate to customer service[5].

Finally, these platforms have substantial frictional costs associated with transactions and transfer of assets.

Indirect exposure

Mutual funds, grantor trusts, and private placement funds are all vehicles through which investors can indirectly access the digital asset sphere. While certain attributes differ meaningfully across the approaches, a few commonalities also exist. Notably, each structure appears to solve most of the issues surrounding accessibility that are present in digital wallets -- individual investors do not need to manage public and private keys. Additionally, the mechanisms are familiar to most investors, don't require the creation of an additional wallet, and tend to have more extensive customer service capabilities. These factors have the potential to mitigate many of the initial fears individuals have when considering an allocation to this brand-new asset class.

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[1] https://www.cnbc.com/quotes/COIN (data as of 9/30/21).

[2] https://www.reuters.com/investigates/special-report/bitcoin-gox/ "Twice Burned –How Mt. Gox's bitcoin customers could lose again" by Alexander Harney and Steve Stecklow (November 16, 2017).

[3] https://www.cnbc.com/2019/05/08/binance-bitcoin-hack-over-40-million-of-cryptocurrency-stolen.html "Hackers steal over $40 million worth of bitcoin from one of the world's largest cryptocurrency exchanges" by Arjun Kharpel (May 7, 2019).

[4] New York Times: "Tens of billions worth of Bitcoin have been locked by people who forgot their key" by Nicholas Albrecht (January 13, 2021).

[5] https://www.cnbc.com/2021/08/24/coinbase-slammed-for-terrible-customer-service-after-hackers-drain-user-accounts/ "Coinbase slammed for what users say is terrible customer service after hackers drain their accounts" by Scott Zamost, Eamon Javers, Jennifer Schlesinger, Stephen Council, Angelica Serrano-Roman (August 24, 2021).

Mutual Funds

Mutual funds use futures, which are cash settled, in an attempt to replicate the price action of cryptocurrencies. More specifically, these funds typically invest in front-end futures contracts. The vehicles then begin the *roll* process, whereby they exchange a purchased expiring contract for a new longer-dated contract. Thus, such offerings do not own the underlying asset itself -- in this case Bitcoin. However, this approach can be inefficient from taxation and transaction cost standpoints. Additionally, these funds often have tracking error (the extent to which a Fund's returns differ from the Index), and do not precisely mirror the price of Bitcoin. The U.S. Securities and Exchange Commission (SEC) has expressed caution around these new funds, as there are outstanding questions about the depth and breadth of the Bitcoin (BTC) futures market, and its ability to accommodate daily liquidity requirements of registered mutual funds, or ETFs.[6] Finally, the volatility in the price of Bitcoin referenced by the futures contracts may introduce further imprecision.

Grantor Trust

The first stop for many investors who want to buy digital assets such as Bitcoin is to invest in a grantor trust, which is a structure commonly used to hold single commodities (ex. Gold, Silver). Grantor trusts for cryptocurrency assets generally trade in the over-the-counter (OTC) market, and are a flow through structure like a limited partnership for tax purposes. Additionally, grantor trusts are typically IRA eligible. These structures provide exposure to single commodities and are not registered under the Investment Company Act. A grantor trust net asset value (NAV) for Bitcoin may at times trade at a premium or discount to the underlying asset for substantial periods of time. For example, the Grayscale Bitcoin Trust (GBTC) reached a premium of 122.3% on June, 2017, and a low of -17.9% in May, 2021.[7] While a premium or discount could conceivably be beneficial, if timed perfectly, the reality is that it most likely makes buying a highly volatile asset like Bitcoin risker. Finally, the fees associated with such vehicles have the potential to be prohibitive for many investors.

Private Placement

Unlike mutual funds and grantor trusts, a private placement for bitcoin offers qualified investors the opportunity to transact at a net asset value (NAV) of a fund that directly corresponds to the price of bitcoin at a specific point in time (for example, 4 p.m. ET). Keeping in mind that digital assets actually trade 24 hours, 7 days a week, transacting at NAV still permits a strategy such as dollar cost averaging to better reflect the true economic performance of the underlying asset. The traceability and accuracy associated with this type of fund served as key differentiators during the vetting process of the cryptocurrency ecosystem.

Regarding security, the highest level of protection against hacking for the time being is referred to as *cold storage*. This means the encrypted private key data that permits transacting in bitcoin (or any digital asset) is stored on a hardware module which is never connected to a routable network. The most secure cold storage facilities are redundant, geographically dispersed with physical barriers to entry, electronic surveillance, and patrols. The private placement selected by Global Manager Research meets this standard.

Fees and operating expenses for cryptocurrency asset investment structures vary widely (0.30%-2.0%), but passive exposure to a single digital asset does not warrant management fees on par with private equity or hedge funds.

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[6] U.S. Securities and Exchange Commission, "Staff Letter on Funds Registered Under the Investment Company Act Investing in the Bitcoin Futures Market" (May 11, 2021)

[7] Cointelegraph: "GBTC unlock edges closer as impact on Bitcoin price remains unclear" by Anirudh Tiwari (Jul 10, 2021).

Liquidity…it depends.

If the definition of a liquid asset is that it can easily be converted into cash within a short period of time, Global Manager Research would suggest that Bitcoin falls in the *relatively* liquid category. Transactions in Bitcoin through digital exchanges can be executed in a market that trades constantly, while mutual funds are open-ended vehicles. However, exchange markets remain fragmented and can hinder accurate price discovery. Additionally, there are concerns about the depth and reliability of BTC futures, the products used by mutual funds. Next, indirect investments in cryptocurrency through grantor trusts and private placement funds typically have restrictions surrounding redemptions and subscriptions. Ultimately, the more liquid markets may come at the cost of sub-standard price accuracy and transparency. Conversely, private placements funds face liquidity restrictions that prevent seamlessly trading in and out of the underlying assets.

Rapidly Evolving Landscape

Looking to the future, Global Manager Research expects that cryptocurrency assets will no longer be the domain of technologists, with the number of investment offerings growing, including passive and actively managed options. The floodgate for this will likely require further development of a regulatory framework coming from U.S. regulators, and further cooperation across industry participants. With that view, a Bitcoin ETF is inevitable, in our opinion, but timing is highly uncertain. Absent any changes in current Internal Revenue Service (IRS) tax guidance, we expect to eventually see a pathway to transition interests from a private placement fund into an ETF in a tax-efficient manner.

Risk Factors

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All investing involves risk including the possible loss of principal. There is no assurance any investment strategy will be successful. An investment in a mutual fund or exchange-traded fund will fluctuate and shares, when sold, may be worth more or less than their original cost. Exchange-Traded funds are subject to risks similar to those of stocks and may yield investment results that, before expenses, generally correspond to the price and yield of a particular index. There is no assurance that the price and yield performance of the index can be fully matched

Virtual or cryptocurrency is not a physical currency, nor is it legal tender. Bitcoin and other cryptocurrencies are a very speculative investment and involves a high degree of risk. Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment, and a potential total loss of their investment. Cryptocurrency has limited operating history or performance. Fees and expenses associated with a cryptocurrency investment may be substantial. Cryptocurrencies are sometimes exchanged for U.S. dollars or other currencies around the world, but they are not backed or supported by any government or central bank. Their value is completely derived by market forces of supply and demand, and they are more volatile than traditional fiat currencies.

The use of derivatives, such as futures, options, swaps and forwards, can expose the investor to additional risk. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks which may hurt a fund's performance. Counterparty risk is the risk that the other party to the agreement will default at some time during the life of the contract. Investing in derivatives carries the risk of the underlying instrument as well as the derivative itself and may not be successful, resulting in losses to the Fund, and the cost of such strategies may also reduce the Fund's returns.

Private capital funds are complex, speculative investment vehicles and are not appropriate for all investors. They are generally open to qualified investors only and carry high costs, substantial risks, and may be highly volatile. There is often limited (or even non-existent) liquidity and a lack of transparency regarding the underlying assets. They do not represent a complete investment program. The investment returns may fluctuate and are subject to market volatility, so that an investor's shares, when redeemed or sold, may be worth more or less than their original cost. Private capital funds are not required to provide investors with periodic pricing or valuation and are not subject to the same regulatory requirements as mutual funds. Investing in private capital funds may also involve tax consequences. Speak to your tax advisor before investing. An investment in a private capital fund involves the risks inherent in an investment in securities, as well as specific risks associated with limited liquidity, the use of leverage and illiquid investments. There can be no assurances that a manager's strategy will be successful or that a manager will use these strategies with respect to all or any portion of a portfolio. Please carefully review the Confidential Private Placement Memorandum or other offering documents for complete information regarding terms, including all applicable fees, as well as other factors you should consider before investing.

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