THE SECRET TOOL THAT INSTITUTIONAL INVESTORS USE TO PROTECT DIGITAL ASSETS FROM HACKS

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Recent news of potential attacks on wallet applications built on the Solana ecosystem, resulting in lost funds, has once again highlighted the long-running problems around the difficulties in securing hot wallets[1]. As a reminder, "hot wallets" involve storing private keys used to sign digital assets transactions, on a computer or phone connected to the internet. This provides users with a convenient way to send, store and receive digital assets. However, they can also be hacked… and the digital assets lost.

The emergence of institutional demand for digital assets has brought with it all kinds of questions around access, security, liquidity, and transparency. Equity, bonds, or commodity futures contracts are all traded on similar exchanges or through the same market makers and brokers. Digital assets, by definition, live in their own, newly created corner of the world and, therefore, accessing them can be difficult. The institutional world is asking for an all-in-one bridge that would facilitate access to digital assets while also managing cybersecurity risk, custody risk, liquidity and all the relevant operational risks on their behalf.

In the last two years, the institutional solution that strikes this fine balance has finally arrived in Europe under the name of physically-backed digital assets exchange-traded products ("ETPs").

Investing in digital assets – the access points

There are many ways to invest in digital assets. Each one comes with its pros and cons, these include:

- direct holdings
  - personal wallets
  - account on centralised crypto exchanges
  - hot or cold wallet with custodians
- synthetic exposure
  - futures or swaps
  - futures backed ETPs
  - structured products
- physically-backed wrapped solutions
  - close-ended funds
  - physically-backed digital assets ETPs

This is a long list, right? The choice can be a bit overwhelming. This is why we have recently released our latest WisdomTree Insights, 'A New Asset Class: Investing in the Digital Asset Ecosystem'. In this report, we discuss, in detail, the pros and cons of these many different access points for an institutional investor. The results of the analysis show that:

- Direct holdings are mostly kept in hot wallets, which are always connected to the internet and, therefore, open to cyber-attacks and hacking. Furthermore, they do not plug at all into existing trading or portfolio management systems.
- Physical exposures through direct investment stored with a custodian in a cold wallet are very tedious to set up correctly and manage daily.
- Synthetic exposures can be useful when leverage is needed, but they suffer from a large performance drag due to the negative roll yield of Digital Asset futures. This negative roll yield is very often higher than 10% a year, i.e. create a 10% per year drag on the performance.
- Close-ended funds suffer from high fees and extremely large discounts and premiums to net asset value. The tracking error and difference of those products are therefore very poor.

This leaves physically-backed ETPs, which appear to be the most robust and easiest to set up for a long-only institutional investor. They combine an easy operational setup and trading with security and efficient tracking. This is one reason why institutional flows in such products have significantly picked up as the product range has become more numerous and available via more venues.

Selecting the right digital asset ETP for your needs

Physically backed digital assets ETPs are new, though if you know how a gold exchange-traded commodity (ETC) works, then you understand the core concepts. When selecting between various ETPs, investors must consider the unique characteristics of each potential product. Investors could use the below holistic framework to approach their selection:

Figure 1: Selecting the right digital assets ETP for your needs

Source: WisdomTree. TER (Annual total expense ratio).

1. Security & custody

The number one concern when it comes to digital assets is cybersecurity. Crypto hacks make the news regularly, and so it is often front of mind for investors. However, in almost every single case of digital assets being stolen, the asset was stored in a hot wallet. The gold standard is storage in a cold wallet (i.e. where the private keys are stored somewhere that is not connected to the internet), managed by recognised custodians for institutional investors.

Having a safe custody solution and a robust process for approving any transfers is critical. Investors should pay attention to the custody provider, the storage solutions, their relationship with the crypto ETP issuer and the security practices for transferring coins in or out of the wallet.

2. Issuer & product structure

Choosing an issuer with recognised expertise in creating and running physically-backed listed financial products and a track record in managing their trading and liquidity, particularly in a crisis, can deliver important peace of mind to investors.

To mitigate the risk, it is also important to see if the issuer has a diversified business and range of products (not only digital assets) that can support periods where digital assets are down and out of favour.

3. Cost of holding

For physically-backed digital asset ETPs, all the direct costs should sit in the total expense ratio (TER) of the ETP. There should not be any other hidden costs. The lower the TER, the fewer coins the issuer takes and the more coins per share are left for the investor.

Trading costs are also part of the cost of holding. Secondary market bid/ask spreads are impacted by many factors: the liquidity of the ETP on the exchanges, the depth of the order book, volatility profile of the coins, inventory level, authorised participants' (APs) ability to source liquidity, and the number of market makers etc. For most efficient trading, it is always best to discuss with the Capital Markets team of the issuer to request an analysis when planning for large trades.

4. Lending & staking

For equity ETFs, investors have become familiar with security lending. This feature can also apply to digital assets ETPs – but not all. Essentially how this works is that the coins that should be held as backing to the product are lent out to counterparties in exchange for additional yield. This additional yield could subsidise the issuer, enhance the product's performance, or both. This activity can, however, be very risky with additional credit/counterparty risk vis-à-vis "unknown" entities the coins are lent to – not to mention the additional process risk with lent coins moving out of cold storage and into hot wallets. In some cases, this lent amount can be collateralised.

Certain physically-backed crypto ETP prospectus' allow for crypto lending, while others do not. Therefore, investors should check the details accordingly with the issuer.

Staking, on the other hand, is very different to lending. It is a unique feature of certain Digital Asset networks and, therefore, of certain digital asset ETPs. Staking needs to be enabled on blockchain networks that use a Proof of Stake consensus mechanism[2]. Overall, staking is less risky than lending, even if the reward for staking can be as high or higher. However, the operational setup of the issuer to deal with staking is an important criterion when selecting an ETP tracking a Proof of Stake asset.

5. Primary and secondary trading ecosystem

How the APs trade the underlying coins to facilitate the creation and redemption of the shares within a crypto ETP is critical for a due diligence process.

When completing due diligence for the AP process, it's key for the issuer to be able to present the subscription/redemption process in detail and make sure the workflow is understandable to the investors.

6. Operational considerations for digital asset basket products

Digital assets are the most at risk when they are on the move since they have to come out of cold storage and move to a hot wallet. In the case of ETPs that are tracking not just one digital asset but a basket of digital assets, rebalancings are necessary to ensure that weight remain in line with the investment objectives. A robust and detailed process around those basket rebalancings is therefore a must.

Sources

[1] https://www.washingtonpost.com/technology/2022/08/03/solana-nomad-hacks-security-questions/

[2] For a brief explainer on staking, see: https://www.wisdomtree.eu/en-gb/blog/2022-07-11/staking-cryptocurrency-the-stakes-are-high

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