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## CASE STUDIES

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“Case Studies” presents a case pertinent to contemporary issues and events in investment management. Insightful and provocative questions are posed at the end of each case to challenge the reader. Each case is an invitation to the critical thinking and pragmatic problem solving that are so fundamental to the practice of investment management.

### BITCOIN ETFS: THE PROS AND CONS OF A SPOT ETF VERSUS A FUTURES ETF\*

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For years Satoshi Trust Co. has operated its one and only Fund I, providing accredited investors long exposure to Bitcoin without the hassle of directly purchasing and holding the bitcoins themselves. At a 2% expense ratio and approximately \$50 million in assets under management (AUM), co-founders Jane and John have enjoyed relatively easy yet sizable management fees for simply purchasing and holding bitcoins.

Notably, despite substantial ups and downs in the crypto market, Jane and John were able to manage price risk and liquidation risk through tight

controls on investor redemptions. Specifically, they required an initial one-year lockup period, after which point investors in Fund I were allowed to redeem their shares, but only on the last Friday of each month and with a minimum one week’s notice. However, Jane and John recognize that in the current, more competitive climate, a follow-on Fund II would require far more favorable terms to attract investors.

Thus, the co-founders have been flirting with the idea of structuring Fund II as an exchange-traded fund (ETF), a conversation which intensified after the first Bitcoin futures ETF was approved by the SEC to register as open-end investment company. Specifically, the ruling allowed for an ETF that mimics returns from holding actual bitcoins through positions in Bitcoin futures contracts

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(but not in the underlying bitcoins themselves). Although John has been strongly in favor of implementing their own Bitcoin futures ETF, Jane has been more reserved about the idea.

On one hand, in relying on trading activity in the continuous market and the Authorized Participants (APs) that redeem and create shares in the ETF, this structure would relieve Satoshi Trust of the risky and onerous liquidation process to meet investor redemptions while providing enhanced liquidity to their investors. On the other hand, the structure requires the fund to continually rebalance and roll forward Bitcoin futures contracts in lieu of holding actual bitcoins, and Jane worries about the added complexities inherent in managing positions in Bitcoin futures. Moreover, the Bitcoin futures market is not as active or as deep as more well-established futures markets, such as in corn or crude oil, and she notes that existing Bitcoin futures ETFs have very high tracking error, even exceeding 75%.

But now, with a recent lawsuit bringing the conversation back to whether the SEC was wrong to reject spot Bitcoin ETFs, Jane is excitedly hopeful and insists on implementing Fund II as a spot Bitcoin ETF, arguing that spot ETFs in general have demonstrably low tracking error. However, John is not so certain that a spot Bitcoin ETF would solve their main issues, arguing that they would be naïve to think that the fund could so easily pass off the burdens associated with investor redemptions to their APs.

Ideally, in a spot Bitcoin ETF, APs would buy and deposit bitcoins in a trust to create new shares in the ETF when shares trade above the fund's net

asset value (NAV); conversely, APs would redeem shares in the ETF in exchange for the underlying bitcoins when shares trade below the NAV. However, given the relatively risky and onerous process in buying and selling large quantities of bitcoins, John worries that, as a spot Bitcoin ETF, Fund II will have great difficulties in getting APs on board – or worse – that Fund II may get several APs who subsequently decline to provide the critical redemption/creation services when Bitcoin prices are particularly volatile. As a result, he is concerned that the ETF shares may trade at a substantial discount from the NAV for prolonged periods of time, hurting Satoshi Trust's reputation. A Bitcoin Futures ETF, he argues, does not suffer this same concern given that redemption (or creation) of shares involves depositing (or receiving) cash or cash equivalents rather than depositing (or receiving) bitcoins.

Unable to budge from this increasingly heated standoff, John and Jane agree to thoughtfully reconsider each other's positions and to resume discussions in the morning.

### Questions

- Why might a spot Bitcoin ETF alleviate some of the issues currently faced by Satoshi Trust's Fund I, which is a spot Bitcoin fund?
- Is it reasonable to worry that a spot Bitcoin ETF might have greater tracking error and price dislocations than a Bitcoin futures ETF?
- What are other pros and cons of a spot ETF relative to a futures ETF? How do these tradeoffs change when considering non-crypto assets?