Mr. Robert W. Errett
Deputy Secretary
U.S. Securities & Exchange Commission ("SEC")

RE: The October 12, 2016 Release No. 34-79084; File No. SR-BatsBZX-2016-30; Comment letter from Ark Invest

Dear Mr. Errett:

We would like to take this opportunity to respond to the letter dated November 8, 2016 from Ark Invest (the "Ark Letter"). There are multiple problems with the Ark Letter:

1. The Ark Letter seems opportunistically released as a mechanism of delaying the approval of the Winklevoss Bitcoin Trust, purely as a means of enabling Ark Invest to create a similar product.
2. The Ark Letter contains comments directly contradicted by its author, Christopher Burniske, in a prior research document published just a few months ago by Burniske himself.
3. Many assertions in the Ark Letter have no factual basis.
4. The Ark Letter is hypocritical. Ark provides a product with exposure to bitcoin, but that exposure is via another product that is both inappropriate for retail investors and priced at levels overtly disadvantageous to investors.
5. Neither Burniske nor Ark have have provided any evidence of direct experience trading, handling or otherwise interacting with bitcoin.
6. In a public forum, Burniske has asserted qualifications that are dubious, at best, and his assertion of those qualifications is unethical.

Attached to the end of this submission is a copy of Ark's report from June 2, 2016 entitled "Bitcoin: Ringing the Bell for a New Asset Class" ("the Ark Report"). Many of our comments below refer both to the Ark Letter and to The Ark Report.

Page 1 of the Ark Letter states:

> "In September of 2015 we became the first public fund manager to invest in bitcoin, buying Grayscale's Bitcoin Investment Trust (GBTC) through the OTC Markets Group's OTCQX."

Page 2 of the Ark Letter states:

> "After thorough examination, we think it would be premature to launch a bitcoin ETF because we do not believe the bitcoin markets are liquid enough to support an open-end fund, or that an ecosystem of **institutional grade infrastructure** [emphasis added] players is yet available to support such a product."

Ark's decision to purchase shares of Grayscale's Bitcoin Investment Trust (GBTC) within the ARK Web x.0 ETF is *clearly disadvantageous* to investors relative to providing investors with the ability to purchase shares in a bitcoin ETF. Ever since GBTC became available for trading, it has sold at a premium of approximately 33% to underlying bitcoin. Consequently, purchasers of ARK Web x.0 suffer an immediate loss of value by Ark's usage of GBTC relative to an investor's ability to gain exposure to bitcoin via the proposed ETF, which would have full creation and redemption procedures. GBTC does not allow for creations and redemptions.

In the Ark Report, Burniske specifically touts the growing institutional infrastructure of the bitcoin ecosystem including bitcoin-backed ETNs that trade on the Nasdaq Nordic exchange.

The Ark Repot also touts the potential for a bitcoin ETF as part of the increasingly attractive nature of bitcoin as an investible asset:

> "Meanwhile, an **institutional infrastructure** [emphasis added] is building with products like Grayscale's Bitcoin Investment Trust, TeraExchange's Bitcoin forwards, XBT Provider's exchange-traded notes (ETN) on Nasdaq Nordic in Stockholm, and **potentially exchange-traded funds (ETFs). With each month, bitcoin cements its role as a tradeable and investable asset** [emphasis added]" (Ark Report page 9).

Page 5 of the Ark Letter states:

> "We would not yet consider the bitcoin markets efficient. There still exist significant differences in price among the various exchanges, especially among exchanges that offer different fiat currency pairs. China drives much of the volume in the bitcoin markets, and the bitcoin/Chinese Yuan (XBT/CNY) quote is apt to trade at a significant premium to the bitcoin/US Dollar (XBT/USD) quote. For example, the Wall Street Journal reported the premium for bitcoin priced in Chinese yuan was as large as 7.2% this summer."

Burniske conveniently neglects to mention that the market for USD/CNY is subject to capital controls, thus creating price discrepancies for many types of assets, including bitcoin and others, that trade both in the US and in China. Burniske fails to look at the price differences between exchanges that trade XBT/USD, a far more relevant metric. Were Burniske to undertake such an examination, he would discover that price differences between bitcoin exchanges that trade XBT/USD are usually de minimus.

Page 5 of the Ark Letter further states:

> "Part of bitcoin's inefficiency is a function of the nascent bitcoin derivatives market. Derivatives provide investors more ways to hedge against bitcoin's potential price movements, introduce more volume and liquidity, and generally give the markets more points of information about bitcoin's future prospects, leading to tighter bid/ask spreads."

That assertion is not backed up by any facts. Burniske provides no evidence proving the would-be effect of derivatives on the bitcoin market. The assertion firstly assumes the predicate is true, that bitcoin pricing is inefficient (which it isn't). The assertion secondarily assumes that a lack of derivatives causes pricing to be inefficient. Nonetheless, we know from direct evidence that many securities do not have a direct derivatives market, yet they trade successfully and efficiently on exchanges both in the US and abroad.

Page 6 of the Ark Letter states:

> "ARK has little doubt that as bitcoin matures it will someday become an appropriate underlying asset for an ETF traded on a national securities exchange."

The comment implies that some threshold event must occur before bitcoin becomes an appropriate asset underlying an ETF. But no information is provided indicating what such a threshold event would be, only an implication that ARK is somehow in a prescient position to predict such event. Historically, there has not been any sort of specific threshold event that determines whether a particular asset is appropriate to underlie an ETF. No doubt Burniske's belief is that the threshold event will simply be the filing of an S-1 registration statement for an Ark Invest sponsored bitcoin ETF.

Page 10 of the Ark Letter states:

> "Proof of control and multisig protocols are both good practices that would bolster shareholder protections. Proof of control is a good example of how bitcoin's digital and transparent nature could increase shareholder trust."

This comment does not make any sense whatsoever. "Proof of control" provides information as to whether a party is able to control its bitcoin holdings at a particular point in time, but it provides zero information as to whether that party will have control of its bitcoin holdings at any time in the future.

Page 10 of the Ark Letter states further:

> "Many of the most reputable cryptocurrency exchanges follow a similar protocol in which hot wallets are 100% insured, but cold storage is not."

This is blatantly false. On the contrary, *none* of the most reputable cryptocurrency exchanges have insurance on their hot wallets, and we have no reason to believe that the Winklevoss product will use a hot wallet at all.

Page 10 of the Ark Letter states further:

> "We don't think bitcoin in cold storage necessarily needs to be insured because (1) a properly designed cold storage system is engineered to a point that makes the likelihood of a heist almost zero, and (2) it would be prohibitively expensive. The insurance for existing gold ETFs serves as a precedent for a bitcoin ETF, especially because one can physically store bitcoin keys in vaults, similar to gold. As explained in the Form 10-K for the fiscal year ended September 30, 2015 for the SPDR Gold Trust (GLD):
>
>> The Trust does not insure its gold. The Custodian maintains insurance with regard to its business on such terms and conditions as it considers appropriate which does not cover the full amount of gold. The Trust is not a beneficiary of any such insurance and does not have the ability to dictate the existence, nature or amount of coverage. Therefore, Shareholders cannot be assured that the Custodian will maintain adequate insurance or any insurance with respect to the gold held by the Custodian on behalf of the Trust. In addition, the Custodian and the Trustee do not require any direct or indirect subcustodians to be insured or bonded with respect to their custodial activities or in respect of the gold held by them on behalf of the Trust. Consequently, a loss may be suffered with respect to the Trust's gold which is not covered by insurance and for which no person is liable in damages."

There are numerous problems with the above set of statements. Firstly, Burniske provides no evidence that a properly designed cold storage system reduces the likelihood of a heist almost to zero. Burniske fails to define the characteristics of such a system. Worse yet, he fails to explore the possibility of insider theft, against which no storage system can ever protect.

Secondly, Burniske's reference to the SPDR Gold Trust is misleading. Although it is true that the SPDR Gold Trust itself may not maintain insurance, the custodian is HSBC Holdings plc, a company with $175 billion of regulatory capital and a balance sheet with $2.5 trillion of assets. In other words, the SPDR Gold Trust is self-insured.

With the above comments, Burniske is simply trying to create roadblocks to approval of the Winklevoss Trust. One could argue endlessly about the merits of various types of storage, insurance, etc. All of these arguments are merely mechanisms to delay approval of the bitcoin ETF until such time as ARK readies its own filing.

Pages 11 and 12 of the Ark Letter states:

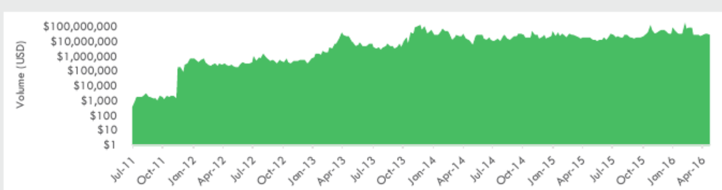
> “ARK is not sure that there is currently enough liquidity to safely fulfill the demand of a bitcoin ETF. We fear that the theoretically unlimited demand of the open-end fund structure could cause an extreme and potentially destabilizing price spike for bitcoin,”
>
> and
>
> “In the above graphic, which is a proxy for what would be available to APs, 14,193 bitcoin traded in the preceding 24 hours, or slightly more than $10 million USD.”

Burniske’s comments regarding liquidity within the Ark Letter stand in stark contrast to his comments within the Ark Report, which contains *four whole pages touting the current and increasing liquidity of the bitcoin market*. Pages 6 through 9 of the Ark Report review liquidity of the bitcoin market.

Relevant highlights from the Ark Report include:

> “If we were to look only at bitcoin traded as a cross with the US dollar, euro and British pound—the assumption being that businesses are monitored more closely when handling these currencies—the picture is starkly different. Daily trades made in these three currencies have been ranging between **$10 to $100 million** [emphasis added] since early 2014”

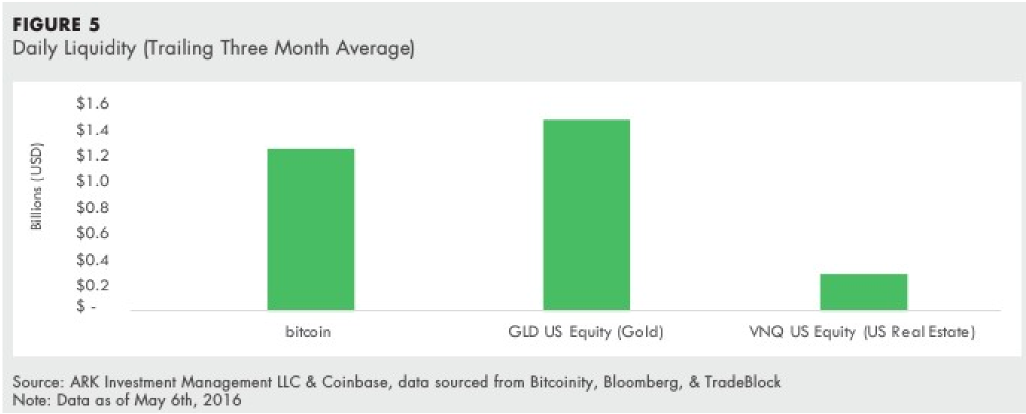
FIGURE 2
Daily Bitcoin Exchange Traded Volume: USD, EUR, and GBP Currency Pairs



Source: ARK Investment Management LLC & Coinbase, data sourced from Bitcoinity global exchange volume & TradeBlock XBX data
Note: Log Scale

(Ark Report page 6)

> and
>
> “As of May 6, 2016, bitcoin’s average daily liquidity for the trailing three months nearly matched the SPDR Gold Shares ETF (GLD) and was three times that of the Vanguard REIT ETF (VNQ), as shown in Figure 5. These numbers are surprising considering bitcoin stored $7 billion in value at the time, while the GLD stored $34 billion and the VNQ stored $56 billion. In our opinion, equal or superior volume with a fraction of the assets under management underscores that bitcoin is punching significantly above its weight”



(Ark Report page 8)

and

"In summation, while bitcoin is not yet the most liquid or widely held asset on the worldwide market, we believe its thin market and fringe status is overstated. A surprisingly robust ecosystem has grown in the seven years since its inception, giving retail investors the tools and opportunity to drive over **one billion dollars in daily liquidity** [emphasis added]" (Ark Report page 9).

Beyond the above, it is important to examine Burniske's comment on page 11 of the Ark Letter regarding "theoretically unlimited" for a new, open-ended vehicle. Burniske applies his point to bitcoin but fails to point out that the same point applies to *any new ETF*, not specifically to the Winklevoss Bitcoin Trust. It is impossible to know in advance what the demand profile will be for an ETF and how that will influence the price of any of its constituent holdings.

Page 11 of the Ark Letter states further:

"over 90% of that volume occurs in the XBT/CNY pair where there is little regulatory oversight and transparency, and is therefore not accessible to APs trying to source bitcoin for an ETF."

Burniske has no reason to believe that APs would be unable to source bitcoin from China. Although China has capital controls for *individual people*, many of the largest APs in the world have a presence in China: Goldman Sachs, Morgan Stanley, Merrill Lynch – all have offices in China.

Page 13 of the Ark Letter states:

"To assess the potential demand for a newly launched bitcoin ETF, one can use the launch of other commodity based ETFs as a proxy" [Burniske then references GLD, IAU and USO].

Burniske's selection of these funds is entirely cherry-picked. Burniske provides no evidence whatsoever that GLD, IAU or USO are appropriate proxies for the Winklevoss Trust. Burniske conveniently leaves out the fact that many ETFs fail within the first few months after launch. Nobody knows how popular or unpopular a bitcoin ETF would be.

Page 13 of the Ark Letter states further:

> "Such sizeable demand could cause a severe price spike akin to that in November 2013, which could lead to headline risk for all players involved in the issuance of a bitcoin ETF. It could also kick-start a positively reinforcing bubble in the bitcoin markets, where the higher bitcoin's price spikes, the more speculative demand would grow. Without a robust derivatives market for institutional investors to short the underlying asset, or otherwise hedge their positions, there likely would be little counterbalance to such enthusiasm. APs could then have trouble sourcing bitcoin and hedging their positions, stalling the creation process.
>
> Following a steep ascent and/or descent, bitcoin could experience prolonged volatility that would complicate the situation for the entrepreneurs and companies building businesses atop Bitcoin's blockchain and using bitcoin as a means of exchange. Entities using bitcoin as a means of exchange are important for the maturation of bitcoin as they provide a long-term base of transactional demand for bitcoin, which over time should help to stabilize the currency."

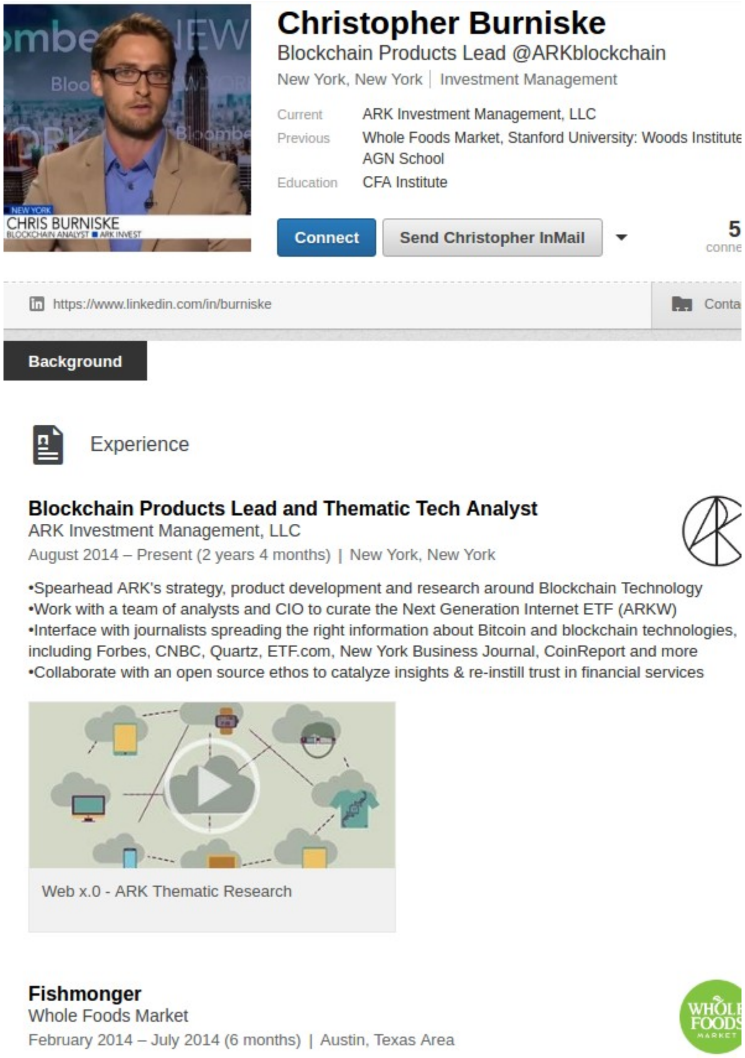
The narrative provided here by Burniske is entirely of his own imagination. Again, he provides no evidence whatsoever to back up his assertions. The launch of the Winklevoss Trust could just as easily be a total failure or it could be slow in the beginning and pick up speed later on, or it could enable entrepreneurs building business atop Bitcoin's blockchain to have new options for gaining economic exposure to bitcoin. Burniske has no way of knowing one way or the other. All of this is pure speculation.

Page 14 of the Ark Letter states:

> "In closing, ARK has little doubt that some day bitcoin will be securitized via an ETF."

Ark provides no timeframe for when securitization should occur. It is in Ark's best interest to delay or derail the Winklevoss product for as long as possible, so that Ark can develop its own product.

Finally, it makes sense to examine Burniske's qualifications in greater detail. Below is a screen shot from Burniske's LinkedIn page:



Burniske claims that he was educated at “CFA Institute”, but, in fact, the CFA Institute is not actually an educational institution in the same manner as a traditional college or university. The CFA Institute is an entity that, among other things, awards CFA Charters to individuals who pass a series of rigorous exams and have appropriate work experience. The CFA Institute also has a rigorous set of ethical guidelines, including standards that mandate:

> “When referring to CFA Institute, CFA Institute membership, the CFA designation, or candidacy in the CFA Program, Members and Candidates must not misrepresent or exaggerate the meaning or implications of membership in CFA Institute, holding the CFA designation, or candidacy in the CFA Program” (Page 213 of the CFA Institute’s Standards of Practice Handbook).

Burniske’s implication that he was educated at the “CFA Institute” is certainly an exaggeration, at the least. We can only hope that the CFA Institute takes notice of Burniske’s behavior and sanctions him accordingly.

Besides Burniske’s position at Ark, we note that Burniske has no full time work experience whatsoever post his graduation from college with the exception of his employment as a fishmonger at Whole Foods. We do not think Burniske’s work as a fishmonger is useful preparation for providing analysis as to whether an ETF should be approved.

We respectfully request that the SEC:

1. Disregard the Ark Letter in its entirety,
2. Examine whether Ark's decision to include GBTC within its ARK Web x.0 ETF without appropriate disclosure be evaluated by the SEC's Division of Enforcement to determine whether any violations or misrepresentations have occurred,
3. Prevent Ark Invest from registering any securities for which the underlying asset is bitcoin, as the Ark Letter is clearly just an attempt to derail the Winklevoss product for the potential benefit of Ark, and
4. Inform the CFA Institute of Burniske's actions.

Thank you for your attention in this matter.

Copyrighted material redacted. Author cites:

Burniske, Chris and White, Adam.”Bitcoin: Ringing the Bell for a New Asset Class.” ARK Invest, 2 June 2016. Web. 25 Nov. 2016. <http://research.ark-invest.com/bitcoin-asset-class>