## Comment on SR-BatsBZX-2016-30 for COIN ETF proposal

On your recent designation for longer period of commission action on October 12<sup>th</sup>, you requested further comments on several points on the proposed COIN ETF (or is it an ETP?) on the BATS exchange. My name is Dylan and I have been involved within the bitcoin sphere for several years, since early 2013, and have been a full-time trader deep within the market for quite some time. I have seen the exchanges and market evolve over time and am glad to see this ETP proposal getting considered seriously and going over much review. Below I have added my thoughts onto the questions you have brought up onto the ability to bring this product to market.

Listed are your questions and my responses to them.

 What are commenters' views about the current stability, resilience, fairness, and efficiency of the markets on which bitcoin are traded?

Bitcoin markets and exchanges are far more disperse, and liquid, than they were in 2012 and 2013 and have gained significant traction over the last 24 months. They have gone from about 4 major players in 2013 (Mt.Gox, Bitstamp, BTCChina, and BTC-e), to a dozen less-major players distributed across many liquidity pools. Bitstamp, Kracken, Coinbase, Gemini, Bitfinex, Okcoin, Huobi, BTCChina. In addition, there are several Bitcoin futures markets that have a significant impact on the spot price (Okcoin, BitVC and Bitmex are the big 3) along with several OTC markets such as the one recently launched by Gemini also play a role and offer liquidity as well. Additionally, there are other 3<sup>rd</sup> party liquidity source for bitcoin provided by companies such as Bitpay who have a steady stream of bitcoin to be sold from their services, in addition to bitcoin mining companies who produce about 1,800 to 2000 bitcoin in inflationary new bitcoin per day. Market data provided by these exchanges seems to be reliable with few problems, most of which seem to stem from the Chinese exchanges and the Great Firewall. It is difficult to determine market fairness on these exchanges due to lack of information and transparency because I am not a regulator or someone participating from the role of security or analysis. You would need to analyze legitimate attempts to enter\exit the market to determine manipulation or fairness, and especially without in-depth behind the scenes analysis of the trade and order history across multiple exchanges I have neither the expertise or knowledge to accomplish this or to voice my opinion.

> 2) What are commenters' views on whether an asset with the novel and unique properties of a bitcoin is an appropriate underlying asset for a product that will be traded on a national securities exchange?

Bitcoin is a unique product compared to any that has existed before it, and while many "digital" assets trade because of our societies ever-moving stride toward digital money, none exhibit the unique set of properties such as crypto-currencies. However, in the 8 years since bitcoin's inception, the underlying security of the actual blockchain and currency of bitcoin has been extremely resolute to both attack and coding issues. It is only the 3<sup>rd</sup> party services such as exchanges that have caused headlines and major issues, namely ones like Mt.Gox and more recently Bitfinex & BitGo. The actual protocol and backbone of bitcoin and other cryptocurrencies such as Ethereum remain unchallenged and extremely secure which is an important factor upon determining its viability for this proposal.

3) What are commenters' views on the risk of loss via computer hacking posed by such an asset? What are commenters' views on whether an ETP based on such an asset would be susceptible to manipulation?

As stated above, the bitcoin system itself is resolute and when properly implemented security systems are practiced resoundingly secure. Solutions like air-gapped, multi-sig cold storage wallets distributed among a variety of physical locations will be paramount to securing the funds of the product. The majority of the funds lost due to hacking in the bitcoin ecosystem are funds stolen from hot-wallets, directly connected to the internet. Cold storage is completely disconnected and a requirement for any significant number of funds being stored especially for such a product such as the COIN ETP. I will explain more on manipulation on comment section #4.

4) What are commenters' views on the manner in which the Trust proposes to value its holdings?

I believe relying on one exchange to determine the end of day closing price of bitcoin to be a false sense of security and bad market practice. Implementing features such as timeweighted average price for the hour leading up to the close will be paramount to preventing manipulation to affect the closing price of the ETP. In addition, I suggest using multiple liquidity sources also prevent further manipulation of the price. I would propose using Bitstamp, Coinbase, Gemini and the possibility of Bitfinex and Kracken to determine the average price of bitcoin at the closing time, or using an already existing product that calculates the bitcoin average prices from multiple exchanges. Additional consideration can be added to using Chinese exchanges such as Okcoin or Huobi to calculate this closing price because they host a significant amount of bitcoin trading activity and demand, however difficulties in foreign exchange between the Yuan may make this difficult to implement in practice. Using this to determine the closing price removes problems from issues on one single exchange (due to DDOS or technical issues) and adds redundancy and a more complete picture of the true price of the underlying asset.

i) "A commenter notes that the Gemini Exchange has relatively low liquidity and trading volume in bitcoins and that there is a significant risk that the nominal ETP share price "will be manipulated, by relatively small trades that manipulate the bitcoin price at that exchange.""

5) What are commenters' views on these recommendations regarding additional security, control, and insurance measures?

As stated above, relying on multi-sig and air gapped physical security of the custody of the coins is paramount. Solutions such as Coinbase and the Bitcoin Investment Trust, or several major exchanges, have implemented are extremely secure, and to my knowledge there has never been a hacking of cold storage in this manner. Only hot wallets described in section #3 have been majorly effected, or via social engineering and complete fraud. All the big headline hacks (such as Mt.Gox or Bitfinex) were either done by A) social engineering or a bad actor within the company, or B) loss of hot-wallet funds that are directly connected to the internet. Airgapped cold storage removes any connection to the internet and guarantees the inability of any remote access and hacking to the funds under management of the proposed ETP.

6) What are commenters' views on the concerns expressed by this commenter?

See section #4 in regards to time-weighted average price and using multiple exchanges to source an average price of bitcoin leading up to the close.

7) What are commenters' views regarding the susceptibility of the price of the Shares to manipulation, considering that the NAV would be based on the spot price of a single bitcoin exchange?

Refer to section #4 again.

8) What are commenters' views generally with respect to the liquidity and transparency of the bitcoin market, and thus the suitability of bitcoins as an underlying asset for an ETP?

The liquidity of the Bitcoin market has grown considerably and continues to improve as the market cap grows. My only concern of an ETP would be their inability to acquire enough bitcoin to accrue (or sell) their required reserves for their ETP during large price moves. While bitcoin liquidity has improved over time, the full source across all the markets is still relatively unknown as nobody to my knowledge has fully investigated where all these liquidity pools are. You must also take into account liquidity sources such as bitcoin miners or Bitpay as expressed in section #1.

As a whole, I believe the ecosystem is in a far more mature place than it was even a few years ago when the government held Senate hearings on Nov 17<sup>th</sup> 2013 to fully bring bitcoin into the public sphere. The recent hack and loss on Bitfinex for 120,000 bitcoin shows this, the exchange was able to recover and distribute the losses among the users and convert a significant portion of it to equity utilizing the new and powerful abilities of blockchain technology

instead of going fully belly up and locking customer funds for several years like what is happening with Mt.Gox and draining what is left to court and lawyer fees. Instead users saw a payout in less than a month with multiple options to recover the stolen funds, with Bitfinex resuming full operation and are still fully functional to this day.

While there are still many developmental hurdles to overcome (scaling bitcoin being paramount), the future remains bright. All of the major technical bugs and development hurdles to bring the code online and give it a strong foundation have been solved, and the market is in the process of adding additional layers ontop to bring services like the COIN proposal to bear fruit. Making sure COIN does not fault to the mistakes made by previous entities in this space and losing their funds is paramount on its process and I'm glad your organization is taking the necessary steps to ensure this.