

To: SEC.

As an investment professional, I have extensively researched Bitcoin and the cryptocurrency world. It is in the public interest that the Van Eck and any other applications for a Bitcoin ETF be rejected.

In addition to have been the subject of extensive price manipulation, Bitcoin **is inherently vulnerable to manipulation because the only way it can deliver value for an investor or speculator is the attraction of additional buyers price levels higher than the speculator's cost.** The manipulation appears in two forms: 1) direct manipulation through activities on exchanges, such as those described in the work of Griffen and Shams¹, and 2) more commonly misleading articles, social media postings, advertisements.

First, I will leave it to other researchers, such as Griffen and Shams to assess the direct manipulation through trading activities on the exchange and provide some examples of misleading statements intended to manipulate the price of Bitcoin.

One class of misleading statements often include conflating Bitcoin with a more general family of technologies referred to as blockchains. The Van Eck proposal actually includes such a claim under the sub-heading "Use of bitcoin and Blockchain²":

"Although value transfer is not the primary purpose for blockchain-focused applications, the usage of bitcoin, the asset, is inherently involved in blockchain-focused applications, thus linking the growth and adoption of bitcoin to the growth and adoption of blockchain-focused applications."

Such claims attempt to promote Bitcoin by citing the potential of the usage of technologies that share similar data structures, referred to as blockchains. They are misleading because a) Bitcoin gives its holders no rights to use blockchain technologies, and b) The variations of the technologies are substantially different from Bitcoin. For example these blockchains avoid the expensive proof-of-work mining and instead rely on "consensus" algorithms executed by validators chosen by the blockchain sponsor. The usage of these technologies is **irrelevant** to the investment case for Bitcoin or the decision to approve a Bitcoin focused ETF.

Another set of misleading claims involve social media posts and articles implying that Bitcoin is being more widely used. Most of these claims, such as alleging widespread usage or growth of usage of Bitcoin in countries such as Venezuela or Iran, cannot be substantiated.

More importantly, **the fundamental investment characteristic of bitcoin relies on manipulation.** This is because an investment in Bitcoin provides no rights to cash flow or to use any real or intangible property. An investment in Bitcoin can only be profitable should one find a buyer willing to pay a higher price.

¹ John Griffen and Amin Shams, "Is Bitcoin Really Un-Tethered" SSRN posted 6/25/2018 (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3195066)

² SEC (Release No. 34-83520; File No. SR-CboeBZX-2018-040) page 9.

A quick survey of articles on Bitcoin using an aggregator like Google News will show many articles on price action discussing new investors buying Bitcoin. How many dollars from new investors, particularly recruiting institutional investors who invest **other people's money** is a theme.

The news that ultimately drives the price of Bitcoin is the potential for more people to buy into it. Hence the large number of comments you receive from holders desiring the approval of the ETF so they can realize a price increase and the volume of articles citing the potential for an ETF to increase the price of Bitcoin by bringing in buyers.

The number or type of investors in Bitcoin is not verifiable because the ownership of an account recorded on the Bitcoin blockchain is unknown. One entity can own multiple accounts and one account can be controlled by an entity, such as an exchange on behalf of many people.

In contrast discussion of the price action of valid investments inevitably revolves around future earnings potentials of firms or the demand for commodities by end users. Much of this information is available to the public.

While it is true that profits from many investments are realized through sales; those investments still provide cash flows that underpin the value of the asset. For example ownership in a stock provides the holder with rights to future earnings that could yield cash flows. Thus the valuation of these instrument changes with evidence of the ability of a firm to produce the earnings or the supply and need for a commodity.

Bitcoin advocates may erroneously claim this objection applies to any currency. They are omitting the difference that governments require their usage of their currency in many activities, particularly the payment of taxes and government fees. This provides a captive market where those who operate in alternative currencies must bear the risk and expense of having to convert between currencies.

Hence valid currencies are heavily used in their issuing countries. Their purchasing power of these currencies varies in a predictable fashion, rarely increasing and decreasing at an inflation rate determined by the economic conditions and activities of central banks.

If the SEC approves a Bitcoin ETF, then it should be willing to approve ETFs that invest in defunct companies and pyramid schemes, because the cash flows and utility of these entities is the same as Bitcoin's. The key differences between these and Bitcoin is that Bitcoin uses a more novel method of recording people's stake, a blockchain, and that there is a significant industry built around promoting the purchase of Bitcoin.

Some writers have argued for approval on grounds that a Bitcoin ETF would provide a safe way for investors to hold Bitcoin. This assumes that investors brokerage accounts and the ETF provide better security arrangements than existing exchanges. Already it is rather easy for an individual to open an account at a legitimate Bitcoin exchange and purchase Bitcoin. Even if holding through the ETF represents less operational risk, this must be balanced against the potential risk to more buyers and

ultimately the financial system should Bitcoin be granted the endorsement by the SEC that your approval of a Bitcoin ETF would imply.

I note that at some point, the Bitcoin promoters exhaust the pool of buyers. Then the price appreciation that was sold to investors will cease to satisfy them and the investors will be left holding the bag. I write this in hope that the SEC will not encourage a situation where we have more bag-holders, potentially with enough exposure to impact the financial system when investors lose patience waiting for appreciation that has ceased.

Thank you for considering these thoughts.

Sincerely yours,

A handwritten signature in black ink that reads "Jonathan G. Harris". The signature is written in a cursive style with a large, prominent 'J' and 'H'.

Jonathan G. Harris PhD, CFA.

Cryptovest.com (Anatol Antonovici) July, 05, 2018 "IBM Wins \$740M Contract for Blockchain, Tech Services to Australian Govt" <https://cryptovest.com/news/ibm-wins-740m-contract-for-blockchain-tech-services-to-australian-govt/>