This is my fifth comment on bitcoin. The first one was put at SR-CboeBZX-2018-040 (right here) on 08/13/2018, the second at SR-NYSEArca-2017-139 on 08/16/2018, the third at SR-CboeBZX-2018-001 on 08/17/2018, and the fourth at SR-NYSEArca-2018-02 on 08/21/2018.

The SEC issued three orders disapproving bitcoin EFT applications on 08/22/2018, but it stayed all of them the next day. This unusual happening reminds us of Commissioner Peirce's Public Statement dissenting Release No. 34-83723; File No. SR-BatsBZX-2016-30.

Her dissent had three assertions. The third assertion was about innovation, but this word is missing in Form S-1 of 7/24/2018 filed by Bitwise ETF Trust. According to her own tenet that the investors are generally better judges about these things than the Commission is, it looks inappropriate for the Commission to praise innovation while an S-1 filer is silent about it yet. The second assertion of hers was about institutionalization, but the institutional investors can invest in bitcoin itself if they desire to do so.

The first assertion of hers was that the Commission had been focused not on the ETP shares proposed but on the underlying bitcoin spot market. This reminds me of what Peter Arnett reported from Baghdad during Gulf War of 1991. It was that some Baghdad residents asked why the Allied Forces were bombing Baghdad while the war had broken out in Kuwait. Commissioner Peirce seems telling us that the Commission did something more than authorized by the laws, but what was written in said Release was quite the opposite:

(Quote 1) Although the Commission is disapproving this proposed rule change, the Commission emphasizes that its disapproval does not rest on an evaluation of whether bitcoin, or blockchain technology more generally, has utility or value as an innovation or an investment. (Quote 1)

The same was also written in every order of disapproval, issued on 08/22/2018. The same statement in all the orders means to me that the Commission stopped there because they could block the proposal without getting deeper into bitcoin.

Before going further on this writing, I would like to point out something in Quote 1 above for future uses. Therein was said "bitcoin, or blockchain technology more generally," but bitcoin is neither a part of or a kind of blockchain technology. Bitcoin to blockchain is like salmon to water. Salmon survive on water, but salmon are not a part or a kind of water. Water will support many other life forms even if all salmon have disappeared. Bitcoin cannot survive without blockchain, but many other things are already being created on blockchain.

That having been checked out, I think the Commission cannot postpone what is left untouched by Quote 1 above any longer. There are two reasons for it: (1) the challenge that caused stay of the recent disapproval orders, and (2) necessity to examine Form S-1 submitted by Bitwise on 07/24/2018. I would like to suggest how to think about these two issues with one knowledge base.

About (1) the challenge that caused stay of disapproval orders of 08/22/2018

There are, within my knowledge and belief, two avenues to get a bitcoin ETF listed under SEC approval. One is rule change, and the other is full disclosure in S-1. This procedure we are viewing at this site, which is the rule change procedure, requires the SEC to approve or disapprove a rule change. The other procedure requires the SEC to let the potential investors obtain from the filed Form S-1 enough and correct information about the intended security so that they can make informed decisions.

The SEC's interests in these two procedures are interlinked. Suppose there is an S-1 that has fully and satisfactorily disclosed all important facts about bitcoin. The SEC will look at it and compare it with the laws. If what is disclosed is legitimate under 78f(b)(5), the SEC would approve the rule change proposals. The SEC has issued several disapproval orders so far without looking into an acceptable S-1, because the SEC could find enough reasons for disapproval without them. The two issues said above are now forcing the SEC to open the nutshell of bitcoin.

Fortunately, Bitwise ETF Trust has already filed Form S-1 with the SEC. We can look at bitcoin closely by finding faults with the S-1 and making necessary modifications to it. Then, the SEC can examine the well-disclosed S-1 against 15 USC 78f(b)(5), from which the SEC has already pointed out three criteria: low probability of fraud and manipulation, protection of the investors, and projection of public interest. Among the three, I would like to be focused on "public interest," which also appears in 15 USC 77b(a)(10).

About (2) necessity to examine Form S-1 for shares of Bitwise Hold 10 Index Fund

Bitwise ETF Trust defined cryptocurrencies as "bearer instruments" in the following paragraph:

(Quote 2) Cryptocurrencies are cryptographically secured digital bearer instruments. Although in the early stages of development and acceptance, cryptocurrencies have the potential to challenge and disrupt many areas of the market, including traditional systems of currency, payments, previsioning and value transfer, among other applications." (Quote 2)

Let us look up "bearer instrument" in some dictionaries.

Wikipedia: A bearer instrument is a document that entitles the holder of the document rights of ownership or title to the underlying property, such as shares or bonds.

Investopedia: A bearer instrument, or bearer bond, is a type of fixed-income security in which no ownership information is recorded and the security is issued in physical form to the purchaser.

Investorwords.com: A negotiable instrument which is payable on demand to the holder, regardless of whom it was originally issued to.

We find that a bearer instrument has something that can be called "underlying property." Comparing a bearer instrument to a string, there always are two parties attached to the string, one on each end. One end has the obligor party and the other end has the obligee party. Bitcoin has the obligee end only, and there is no concept of obligor in the world of bitcoin. Therefore, a bitcoin is not a bearer instrument, and it will never be one.

Cryptocurrency was defined that way in Quote 2 above, because the filer believed bitcoin was a currency but found it difficult to defend such an idea from furious opposition. Then, is it easy to tell bitcoin is not a currency? It was not easy for the CFTC at least. I requote what has been quoted (with some no-harm modifications) in said S-1 from A CFTC Primer on Virtual Currencies:

(Quote 3) a digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value, but does not have legal tender status in any jurisdiction. Bitcoin and other

cryptocurrencies are distinct from "real" currencies, which are the coin and paper money of the United States or another country that are designated as legal tender, circulate, and are customarily used and accepted as a medium of exchange in the country of issuance. (Quote 3)

Visiting CFTC site, we encounter the CFTC's (kind of) disclaimer saying that the idea of Quote 3 above was originally from the IRS. The IRS does not recognize bitcoin as a currency, but the CFTC is sweating to say it with its own mouth. The CFTC defined bitcoin "a commodity" but it stated in another literature that currency is a kind of commodity. As the CFTC did not go one more step into the detail to define bitcoin more narrowly, we don't know whether the CFTC think of bitcoin as a currency or not.

We all have a hard time defining bitcoin, because of the difficulty to tell whether it is a currency or not. Then, why don't we take both courses? First, assume it is not a currency, and then find what should be disclosed in a Form S-1. Next, assume it is a currency, and then find what should be disclosed in a Form S-1.

If bitcoin is not a currency, an S-1 filer is required to disclose that bitcoin does not have intrinsic value. Some people, e.g. some editors of Investopedia, believe that bitcoin does have intrinsic value. However, what they call intrinsic value is, according to their article "What Is Bitcoin's Intrinsic Value?", based on many assumptions including that bitcoin is a currency. As we first assumed it is not a currency, this assumption is broken, and there is no intrinsic value.

If bitcoin is a currency, it would be the first money in history that does not have intrinsic value. Asserting that it has intrinsic value because it is currency is a circular argument when it is assumed that it is a currency. Therefore, for bitcoin to have its intrinsic value, it should have intrinsic value without consideration that it is a currency. Bitcoin is not a note money because there is no obligor to it. It is not a warehouse certificate money, because nothing backs it. If it is money, it should be a commodity money. Every commodity money, before bitcoin, had its intrinsic value.

When we hear about ancient shell money, we vaguely imagine that there could be no intrinsic value to it. However, those shells used as money were not ordinary ones. The shells called "cowry" was liked by people whether it was money or not. Even today, people will buy cowries while it is not money, because of its value as ornaments. Likewise, every kind of commodity money had its intrinsic value. As bitcoin has no intrinsic value, it is the first commodity money without intrinsic value, if it is a currency. This fact should be disclosed if we say bitcoin is a money.

Further, differently from other currencies, bitcoin can never function as a medium of exchange and as a measure of value at the same time. USD can mediate all transactions of the whole world, because new USD can be created any time when necessary without much cost. The value of USD does not decrease simply because the quantity of USD has increased. Issuance of new USD is not creation of a new thing, but a change of liquidity. For example, suppose you borrow money from a bank and deposit back into your account in the same bank. These two actions increase M-2, but no new thing comes into being. In exchange for your borrowing, you gave the bank a promissory note and provided your building as collateral. The bank gave you money which is more liquid and took from you a promissory note which is less liquid, lowering the bank's overall liquidity. You got money which is perfectly liquid, and restricted

mobility of your building with is less liquid, increasing your overall liquidity. You pay interest in exchange for this liquidity change. Every step of the procedure involved give and take, so there is no reason for general price level to go up. This is the truth behind large scale QE and stable price level since 2008. Quantity theory of money is an illusion. US Dollar's capability of QE is a boon, not a flaw.

In contrast to it, total number of minable bitcoins is limited to 21 million coins, so it cannot cover all transactions of the world. Splitting one coin into 100 million pieces, as designed, may look solving this problem, but this way of solution will make another problem. When it is split and used, the price of one coin must go up. Bitcoin is a thing, so quantity theory of money works for it. Because of the limitation of quantity, it can never work as a medium of exchange while working as a measure of value. This should be disclosed, too, if we are to define bitcoin as money.

Moreover, bitcoin is not lendable on interest. If an extreme case happens and bitcoin becomes the only money of the world, you cannot borrow money to buy a house. The core of bitcoin idea is going without a bank. Without a bank, we cannot pool small savings into a big lending. Without interest, systematic and meaningful lending cannot happen. Even in the interest-free Islamic countries, banks are permitted to imposed interest on their money lent. In contrast to it, nobody can change bitcoin to empower it to be lent on interest. This should be disclosed, too.

And bitcoin is not a legal tender and it can never be a legal tender. Designation as a legal tender involves a government's taking over liability on it. You can pay your tax any time with a legal tender. Tax is what the people owe to the government, while a legal tender in your hand means what the government owes to you. Therefore, payment of tax with a legal tender means mutual clearance of debts.

Before paying tax, you obtained the legal tender by providing something to the government, directly or indirectly. Directly, you can obtain cash by working for the government, for example. Indirectly, it takes many steps. You worked for your employer and got the money. The employer borrowed the money from a commercial bank in exchange for a promissory note and by providing a building as collateral. The bank lent the money out of its account with a Federal Reserve Bank. The balance in the Federal Reserve Bank was obtained by selling a Treasury Bond to the Federal Reserve Bank. Possession of the Treasury Bond by the Federal Reserve Bond means that the Federal Reserve lent money to the government. Nobody can obtain a legal tender from the government for free, and this rule is called "real bills doctrine."

In contrast to the preceding paragraph, bitcoin is being obtained by providing nothing to the government. Therefore, the government owes nothing to bitcoin holders. Therefore, the government will never be allowed to take over any obligation, if any, on bitcoins. The government's taking over undue obligation is the same as formal permission of counterfeit bills. That's why bitcoin can never be a legal tender. This should be disclosed, too.

Real bills doctrine mention two paragraphs above dissipates the illusion that USD is being created out of thin air. Said paragraph illustrates a chain of exchanges. Give and take of value, which happens at every link, can no way be interpreted as a creation out of thin air. Therefore, any expression in a Form S-1 based on this illusion should be deleted. For example, substantial part of Quote 2 above should be either

deleted or amended. Contrarily to what is said therein, bitcoin will never be able to disrupt a sound system of note currency.

When everything is disclosed as the forgoing and according to the SEC's additional requirements, the SEC would be comfortable with either approval or disapproval of the stayed proposals and this one (SR-CboeBZX-2018-040). I am against the whole idea of bitcoin, but am not able to talk many aspects of the laws the SEC is assigned to uphold.