



Personal Finance

Bitcoin Innovations And Obstacles

Troy Adkins 02.28.14, 7:42 PM ET

The Bitcoin peer-to-peer digital currency system has experienced a dramatic increase in popularity. Since the Bitcoin currency system was created in 2009, over 12.3 million Bitcoins have been created as of Feb. 13, 2014. The total market value of Bitcoins now exceeds \$6.8 billion, and millions of Bitcoins are now being exchanged daily to purchase items such as food, tickets, electronic equipment and automobiles.

Given the dramatic rise in the use of this new type of high-tech crypto-currency system, many people are starting to contemplate the merits of using Bitcoins as a mainstream exchange medium. Now, with the creation of Bitcoin exchange-traded funds (ETFs) under way, many people believe that the Bitcoin currency system is poised for dramatic growth, increased price stability and mainstream acceptance as a viable currency for conducting ecommerce, as well as an alternative investment opportunity. With these points in mind, it is important for people to have a better understanding of the Bitcoin currency system.

Legality Issues

In terms of using Bitcoins as an exchange medium, it is legal in the U.S. to operate a private currency system. While this may be a surprise to the younger generation, it is probably no surprise to older people, as they most likely remember songs such as "Sixteen Tons," which told the story of mining companies that used scrip to pay their employees, which in turn could only be used to purchase supplies from the mining camp's company store. People who remember those times are unlikely to ever utilize a digital currency system to a large degree. With that said, the issues associated with the old type of scrip,

truck or barter system of commerce will not likely be a major issue when using a digital currency system due to the size of the U.S. economy, its demographic makeup and the internet's scale. As a more recent and successful example of a local currency system, the city of Ithaca, N.Y. has been using the Ithaca Hours currency since 1991. Today, Ithaca Hours are recognized as the oldest and largest local currency system still operating in the U.S.

While local currency systems are legal in the U.S., prospective Bitcoin purchasers and investors should not overlook the fact that Article I, Section VIII of the U.S. Constitution states that the U.S. Congress has the authority to coin money, regulate the value thereof and fix the standard of weights and measures. In addition, Article I, Section X of the U.S. Constitution states that no state shall coin money. Therefore, while there is nothing in the U.S. Constitution that explicitly prohibits the use of a private currency system, it is not a far stretch of the imagination that Congress could restrict the use of a private currency if it deemed it to be in the nation's best interest.

From a public policy standpoint, it should be obvious that the use of Bitcoins as an exchange medium would likely be curtailed by Congress if Bitcoin's scale were ever to increase to the point of hindering the Federal Reserve from implementing its monetary policies for fostering stable prices, full employment and moderate long-term interest rates. With that said, the total amount of annual economic production in the U.S. now exceeds \$16 trillion. Therefore, the Bitcoin currency system would have to experience exponential growth before it would have an impact on monetary policy in the U.S.

Regulatory Issues

In the U.S., the movement to expand Bitcoins use to the mainstream economy is clearly gaining traction. For example, on Feb. 3, 2014, the Wall Street Journal announced that it is launching a new feature in its MoneyBeat section of the paper called "BitBeat." This section includes a daily roundup of Bitcoin news, notes and thoughts. Given this type of topical exposure, news about the Bitcoin currency system will be disseminated to a wide audience in a routine and timely manner.

In recognition of the growing popularity of Bitcoins, on Jan. 31, 2014, the Financial Crimes Enforcement Network (FinCEN), a bureau of the U.S. Treasury Department, confirmed that Bitcoin miners and investors will not be regulated. FinCEN's ruling states that people who mine virtual currencies for personal use, and businesses that buy and sell virtual currencies purely as an investment, will not be considered money transmitters. This, in turn, exempts them from requirements to register with the government and comply with certain money-laundering regulations. FinCEN's ruling is a major win for Bitcoin currency system proponents and should help promote its ongoing usage and popularity in the U.S. However, FinCEN's ruling is likely to be just the latest development in legal grounds, as more governmental bodies will undoubtedly seek clarity on the matter and await guidance from higher authorities.

Outside of the U.S., regulatory policy appears to be curtailing Bitcoin currency system utilization to a certain degree. This cautious position stems from the material problems that are starting to arise around the world. For example, according to the European Banking Authority, Bitcoin traders aren't protected against losses if their virtual exchange collapses. This is a cause of concern for some foreign regulators, because as recently as Feb. 6, 2014, Mt. Gox, which is one of the world's biggest Bitcoin trading exchanges, paused all Bitcoin withdrawals from its currency trading system due to a technical glitch. Theft from Bitcoin digital wallets have now exceeded \$1 million, and two people were recently arrested for illegally generating Bitcoins worth more than \$963,000.

In response to the increasing problems associated with the Bitcoin currency system, China has barred all financial institutions, such as Baidu, from handling Bitcoin transactions. In addition, the Russian prosecutor general announced on Feb. 6, 2014, that the use of Bitcoins and other digital currencies is illegal under its current law. Issues like these are likely to continue until the Bitcoin currency system is further developed, and policies and procedures are put in place to establish a robust digital currency system. Even then, however, it is doubtful that the Bitcoin currency system will gain traction in these types of restrictive countries.

While U.S. policy makers and regulators are taking more of an unbridled approach to Bitcoin regulation, it is important to note that some companies in

the U.S. are taking a proactive approach toward restricting the use of all digital currencies. For example, Apple, Incorporated is one of the most recent companies to ban the use of all crypto-currency applications from its systems. With this in mind, U.S. investors should remember the caveat emptor principle before participating in the Bitcoin currency system.

System Issues

The Bitcoin currency system's complexity cannot be overstated. This is one of the main problems that needs to be overcome, because if people do not trust the system, they will not use it to a large degree. Some type of authenticity mechanism must be put in place to convey to the general public that the Bitcoin currency system is legitimate. With this in mind, some Bitcoin currency proponents are now proposing that it should be regulated like a currency - or commodity - exchange.

Problems surrounding the Bitcoin currency system are exacerbated when one considers that there are fewer than 10 core developers of the system. This is a problem, because such tight control of a very complex system raises significant skepticism among potential customers. Marketing the Bitcoin currency system as an "open source code" design - and one that is politically neutral, transnational, decentralized and accessible by everyone to monitor - is a helpful strategy. However, it is highly unlikely that enough people will ever spend the amount of time on the GitHub Repository or sourceforge.net to develop the understanding and confidence in the system's design, functionality, and checks and balances to garner the level of support that Bitcoin needs to solidify it as a mainstream currency system.

To complicate matters even further, perhaps the greatest issue surrounding the Bitcoin currency system pertains to a process coined "Bitcoin Mining." In essence, Bitcoin mining pertains to a process where "miners" collate digital peer-to-peer transactions that have recently taken place in the Bitcoin currency system. Once these transactions have been compiled, the Bitcoin miners generate a digital block ledger to account for the transactions. These transactions represent all activity in the Bitcoin currency system since the time in which its cumulative global block chain ledger book was last updated. This type of cumulative ledger has been maintained since the Bitcoin digital currency

system's inception in 2009.

Bitcoin mining maintains the Bitcoin currency system's integrity by reconciling all legitimate transactions, and parsing out all problematic transactions, such as the potential for users to double spend their Bitcoins. In return for the miners' use of their time and resources, they receive compensation in the form of newly created Bitcoins. This, in turn, increases the number of Bitcoins in circulation and helps grow the Bitcoin currency system in an efficient, effective and accountable manner. Unfortunately, while the idea of a Bitcoin mining operation can be viewed as a working solution to developing a robust digital currency system, it is also easy to imagine how this type of system could be manipulated by a small group of sophisticated code developers for financial gain.

Exchange Traded Fund (ETF) Issues

In anticipation of the future growth of the Bitcoin currency system, two Bitcoin funds have been established in the financial market. The first fund is being marketed as the Bitcoin Investment Trust, which is managed by Alternative Currency Asset Management, a wholly owned subsidiary of SecondMarket Holdings. The second fund is being marketed as Pantera Bitcoin Advisers, a hedge fund managed by Pantera Capital. Currently these investment options are only available to wealthy investors. Therefore, it is presumed that the investors in these products have enough discretionary income to weather any type of adverse results that may be experienced by holding investments tied to the value of Bitcoins.

Going forward, what may prove to garner more public attention is the creation of a new Bitcoin ETF for the masses. This product is now under review by the Securities and Exchange Commission and has been identified in the SEC Form-1 Registration Statement as The Winklevoss Bitcoin ETF. If this product is approved, it should make investing in Bitcoin as simple and straightforward as buying shares of any other ETF. Therefore, if and when this investment is made available to the general public, it may be a game changer for the Bitcoin industry, because it will likely help increase the value of Bitcoins, stabilize their trading price and solidify their acceptance by mainstream society. Therefore, from the standpoint of developing the Bitcoin currency system, ETFs should be a significant asset in helping to establish a digital currency system for the masses.

While establishing ETFs will likely be of great value to the Bitcoin industry, from an investor's standpoint, investing in a Bitcoin ETF to gain exposure to Bitcoins seems naïve and unnecessary. To explain this position, keep in mind that ETFs are typically designed as passively managed index funds that hold a basket of securities to replicate the investment performance of a specified benchmark proxy. This type of investment product makes sense for an investor who wants to invest in a security that tracks the performance of an index, such as the Dow Jones Industrial Average, where the Dow Jones Industrial Average ETF holds stocks of 30 individual companies, such as Caterpillar, 3M and Coca Cola. However, in the case of Bitcoin ETFs, the only underlying security will be Bitcoins, and the Bitcoin ETF's performance will simply track Bitcoins' performance.

Given this fact, the whole concept of investing in Bitcoin ETFs is completely misguided and perhaps disingenuous, unless the ETF is being created in anticipation that the Bitcoin price will rise to such a high level that mainstream investors will not be able to afford to purchase them individually. Even then, however, the Bitcoin currency system has a built-in mechanism designed to facilitate the purchase of proportional amounts of Bitcoins, and these proportional amounts can be carried out to eight decimal places. Therefore, given the availability of Bitcoins on a variety of exchanges and in fractional proportions, coupled with the fact that the only underlying security for a Bitcoin ETF will be Bitcoins, it seems very hard to identify any type of need to create this type of ETF.

Bottom Line

The development of an alternative currency system will always be of interest to people who worry about a country's national debt level, a country's inflationary risk and a country's unclear central bank policies. While many technical and regulatory problems still need to be worked out, and currently participating in the Bitcoin currency system is somewhat akin to living in the "Wild West," it is realistically conceivable that a robust Bitcoin currency system will be developed and likely garner worldwide support by the masses over time.