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Bitcoins: Hacker Cash or the Next Global Currency?

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Currency is an ancient technology that evolved from the bartering of tiny stones for goods thousands of years ago. This technology developed because it became impractical to trade cattle or fruit for long-term trades, and coins were developed by 500 BC in order to alleviate such problems. Currency built the city of Rome, put a man on the moon, and even supercharged the Internet. Yet we take currency, an ancient and incredibly complex technology, seemingly for granted. With the birth of the Internet, a brand new form...
of currency, crypto currency, was also born; its more common name is Bitcoin.34

Bitcoin is a decentralized currency and 100 percent powered by peer-to-peer transactions.5 No single organization supervises or oversees this market; the currency is both valued and managed by the consensus of all its users.6 The only way the currency continues to be viable is if everyone uses the same programs and consents to honor its market value.7 It is this lack of oversight, coupled with the nature of the market that has led some regulators to view this digital money as the “wild west” of currency that permits anonymous transactions to occur very easily.8 This has earned the currency its moniker, “hacker cash.”9

CREATION AND FUNCTIONALITY OF THE BITCOIN MARKET

Originally conceived by David Chaum in 1998, crypto currency was created as a means to not only have a purely digital electronic currency, but also to permit people to have total anonymity in connection with their transactions.10 Building on this theory, a software developer working under the pseudonym “Satoshi Nakamoto” designed the protocol and “mined” the first bitcoin in January of 2009.11 This “mining” process would be the primary method of increasing the money supply for the currency and participants in the market use the same process today.12

This mining process has been explained as users “solving math problems” to earn coins.13 This method releases coins not only to expand the currency worldwide, but also to prevent an over-flooding of the market.14 One major concern with bitcoin has been its volatility and the fact that an over-flooding of the market would cause the price to drop, triggering fears that it will never be accepted as a currency.15

Bitcoin is planning to release coins through this mining process under a predetermined schedule through the year 2140 with the goal of ultimately having 21 million bitcoins in circulation.16 This mining process produces 25 coins every 10 minutes per successful mining attempt.17 In order to manage the release of the currency and to continuously increase the money supply, the amount of coins that can be successfully mined from each attempt will be halved over
time. This pre-determined schedule would still allow bitcoins to be mined in 100 years but only in fractional amounts.

After a miner completes this process, miners are now in possession of a set of coins. The miner can then choose to either hold the currency or exchange the currency with other users/vendors for goods, services or even other forms of currency like the Euro or the U.S. dollar. The advantage of such exchanges is that there can be no way to trace the transaction; so long as an individual has the bitcoin program, one can accept the bitcoin anywhere on the planet. Additionally, as evidenced by the history of this market, the exact rate of conversion between bitcoins and U.S. dollars or other forms of currency is hard to consistently predict and is considered one of the major concerns with the currency.

INVESTMENT AND ACCESSIBILITY OF THE MARKET

A significant advantage of bitcoin is that as long as you have the program or even just an Internet connection, you can use and obtain this currency. This allows the currency to be accessible nearly anywhere on the planet. Given the interest in monetizing the currency, which is defined as the application of the
currency to the U.S. dollar and the Euro for exchange purposes, there is also intense demand for investment in the market.  

Bitcoin has drawn comparisons to the dotcom boom in the late 1990s in the sense that it is being considered the next frontier of digital innovation that could bring a substantial windfall of profits. Venture capitalists have poured their money into opportunities that are building up mining operations and companies that are making concerted efforts to provide inroads to the market. In fact, through June of 2013, there have already been multiple deals, totaling over $12 million dollars, where investors are backing bitcoin-supporting companies. Analysts have opined that there would be upwards of $65 million to $100 million in available investment capital for future starts-ups.

Some of these businesses are not even connected to the mining of the bitcoins but are rather aimed at providing investors an opportunity to invest in bitcoins themselves. These companies, some powered by high-end Wall Street investment firms, are creating funds or trusts that are solely based on bitcoin valuation and give investors a vehicle to speculate on the pricing of the coins themselves. There have been some notable investors behind these types of trusts including the Winklevoss twins, famous for their role in the creation of Facebook, and three of the original founders of PayPal.

The most obvious application of bitcoin technology is trying to design a method for traditional brick and mortar businesses so they can accept these digital coins. While some creative inventors have been able to capture the specific technical codes powering bitcoins and encapsulate these codes into a physical “coin,” most vendors would be unlikely to accept these items as payment. While the coins are technically valid representations of the coins, vendors have to choose to take these coins and then have to find a way to manage the physical items. Additionally, there are numerous companies that are trying to corner the market and the resulting competition confuses the issue and the acceptance of these currencies.

To address this problem of a lack of standardized physical currencies, many venture capitalists have started pouring their investment capital into digital platforms that allow merchants to accept these coins for transactions. One company, Coinbase, claims it handles 175,000 transactions a month and has already raised $6 million dollars in investments to support its services. Coinbase offers to accept bitcoins for merchants and charges a one percent
transaction fee to convert it to U.S. dollars for merchants. An Atlanta based company, BitPay, charges a similar fee and assists over 10,000 merchants in 164 countries to use this platform so they can accept bitcoins. To summarize, the advantages of this currency are diverse and are readily available to any interested investor who is willing to eat a little bit of risk.

NO REGULATION, NO PROBLEMS?

This developing and volatile market has a darker side, which has drawn concerns from Congress, the Department of the Treasury and the SEC. Senators Thomas Carper (D-Del.) and Tom Coburn (R-OK) opined in a letter to the Department of Justice (DOJ) and the SEC that “the speed at which payments can be sent globally and the potentially profitable investments that can be made by trading virtual currency have made them attractive to entrepreneurs and investors alike, however, their near anonymous and decentralized nature has also attracted criminals who value few things more than being allowed to operate in the shadows.”

Many market observers of bitcoins have commented that if one knew how to work the system, it would be possible to conduct transactions in a way that would totally disguise the entire transaction from any observation. It would not be overly difficult to disguise the identities of the parties to the transaction from any law enforcement or other agencies. This conduct is illegal in the U.S., but it is also suspicious because one of the reasons why parties would require a transaction to be totally untraceable suggests illegal activities.

This concern about giving criminals a chance to easily disguise their transactions is a major problem for criminal enforcement agencies since their main weapons to combat organized crime activities is to “follow the money”. If agencies are unable to trace transactions associated with criminal activity, they will be greatly disadvantaged in their ability to combat these problems. These problems are currently under investigation not only by the FBI but also by the Department of Homeland Security. The FBI is concerned that the technology could be co-opted by criminal forces in order to launder money from their illegal activities and never be caught. Another issue is that bitcoins could be used to bypass internal revenue and currency regulations to the detriment of the U.S.
The SEC has worked with the Department of Transportation (DOT) and other agencies to declare bitcoin a legal currency that the SEC has authority to regulate. While the SEC declared that it simply has this ability, the official seal of approval for this concept was approved by a court in Texas in SEC v. Shavers and Bitcoin Savings and Trust. In this case, Shavers was accused of effectively running a ponzi scheme aimed at defrauding investors of their investment and disguising the losses under the guise of the volatility of the new market of bitcoins. The court found Shavers guilty of fraud.

**DONATING BITCOINS TO U.S. CANDIDATES?**

Dan Backer, an election attorney in Washington DC, has opined that allowing campaigns to accept these coins as valid tender for donations would be beneficial. “It’s a great idea,” said Backer, “[it would] expand the number of Americans who can get involved in campaigns to support the candidates they want, how they want. It is the next logical iteration of the democratization of the political process enabled by the Internet.” Backer is a huge supporter of allowing campaigns to accept donations via bitcoins and is currently arguing before the Federal Election Commission (FEC) to permit candidates and their committees to accept donations in this form. Currently, the FEC does not allow donations but it may choose to do so in the future.

Backer brushes off the concerns that anonymous or foreign entities could donate funds to campaigns through these coins as a work-around from the current laws because he feels such concerns are irrelevant or easily remedied, and states that many already accept donations through credit cards online and have a very low rate of fraud or other legal issues associated. Under the current law, campaigns are required to ask for a donor’s name, occupation, and to solicit information concerning their citizenship. Alternatively, Backer states that the FEC could require campaigns to apply this same standard and refuse to accept bitcoin donations from entities that intentionally disguise their identity or attempt to sidestep legal requirements.

**WHAT’S NEXT?**

Given the market capitalization of bitcoins, it is clear that there is money in the market and people are clearly interested in using this currency. There are
many legal issues but this is true for new ideas and how the law reacts to them. With the SEC now taking control of the matter, it is likely that future regulations will be implemented to address these legal concerns and grant people more access to this currency.

NOTES

3 DAVID CHAUM, BLIND SIGNATURES FOR UNTRACEABLE PAYMENTS, ADVANCES IN CRYPTOLOGY PROCEEDINGS OF CRYPTO 82, 199-203 (Springer US, 1st ed. 1983).
6 Id.
7 Id.
17 Id.
18 Id.
19 Id.
20 Id.


27 Id.

28 Id.


30 Id.


34 Id.


38 Id.

39 Id.


41 Id.


43 Id.

44 Id.


47 Id.
53 Id.
54 Id.
58 Id.
59 Id.