## **Blog Bitcoin: Investment or Bubble?**

As the director of research at Buckingham Strategic Wealth and The BAM ALLIANCE, it's not surprising that I've been getting lots of calls lately about investing in Bitcoin. Just seven years ago, Bitcoins were trading at about 10 cents. Four years ago, their value had jumped to about \$125. About a year ago, their value had reached about \$600. On Wednesday, November 29, 2017, their price had risen to more than \$11,150. Then, by the following morning, it had fallen to about \$9,100, a drop of almost 20 percent in less than 24 hours. By that evening, they were again trading at about \$10,000. Prices continued to climb, north of \$10,500, early Friday, possibly on news that a new Bitcoin futures contract received regulatory approval. Nothing attracts the attention of the public like the possibility of missing out on the latest craze. Regret aversion is a powerful emotion.

## What Are Bitcoins?

Bitcoin is a worldwide cryptocurrency and digital payment system called the first decentralized digital currency — there is no central repository or single administrator. It was invented by an unknown person or group of people under the name Satoshi Nakamoto and released as open-source software in 2009. Bitcoins are created as a reward for a process known as mining.

There are no physical Bitcoins, only balances kept on a publicly distributed ledger. The system is peer-to-peer, and transactions take place between users directly, without an intermediary. These transactions are verified by network nodes and, like balances, are recorded in a publicly distributed ledger called a blockchain. It's important to understand that they are not issued or backed by any banks or governments. However, while they are not "legal tender" (they don't have the approval of the U.S. government), there is currently a limited ability for Bitcoins

to be exchanged for other currencies, products and services. Bitcoins can also be traded, and the CME's introduction of a futures contract in Bitcoins has helped attract even more attention.

# **Risks of Investing in Bitcoin**

Because their value is not guaranteed by a government, their digital nature means the purchase and use of Bitcoins carries severe inherent risks. That is why many investor alerts have been issued by the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), the Consumer Financial Protection Bureau (CFPB) and other agencies.

Regulatory Risk: Bitcoins are a rival to government currency and may be used for black market transactions, money laundering, illegal activities or tax evasion. As a result, it also seems likely that governments may seek to regulate, restrict or even ban the use and sale of Bitcoins, and some already have. Others are coming up with various rules. For example, in 2015, the New York State Department of Financial Services finalized regulations that would require companies dealing with the purchase, sale, transfer or storage of Bitcoins to record the identity of customers, have a compliance officer and maintain capital reserves. Transactions worth \$10,000 or more will have to be recorded and reported. Such concerns should raise questions over Bitcoin's future in terms of liquidity and longevity.

Security Risk: Many enthusiasts celebrate the decentralized properties of Bitcoin; however, this feature also brings with it a great challenge for novice purchasers. The challenge is in securing or protecting your "coins." When you exchange dollars for Bitcoins, you are leaving behind many financial protections and taking responsibility for the security of your Bitcoins into your own hands. While there are steps you can take to help secure your coins, should you misstep and get your coins stolen or lost, there is nobody to call to get them back.

After buying Bitcoins on an exchange, such as Coinbase, purchasers have several choices regarding where to store them. Many choose to leave them in a Bitcoin wallet offered by the exchange. However, by doing so, purchasers assume a large degree of security risk because exchanges generally retain control over the private keys associated with Bitcoins. Given that exchanges store and have control over thousands of Bitcoins, they are prime targets for hackers. One especially notorious hacking incident took place in 2014, when Mt. Gox, a Bitcoin exchange in Japan, was forced to close down after millions of dollars of Bitcoins were stolen.

If a hacker gains access and steals a Bitcoin owner's private encryption keys, the hacker could transfer the Bitcoins to another wallet and take control of them. It is generally wise for purchasers to immediately move Bitcoins away from the exchange on which they were purchased to some other type of wallet, where you can actually control the private keys associated with the Bitcoins purchased. This can be done through a web-based wallet, a hardware wallet (which is similar to a thumb drive) or even by choosing to use a paper wallet (printing out the Bitcoin private keys and addresses, and not keeping them on a computer or hardware at all). However, all of these options have their own associated benefits and risks to be weighed.

Insurance Risk: Some investments are insured through the Securities Investor Protection Corp. Bank accounts are insured through the Federal Deposit Insurance Corp. (FDIC) up to a \$250,000 per taxpayer ID. While some Bitcoin exchanges have FDIC insurance for dollars deposited in an account with the exchange, Bitcoins and other cryptocurrencies are not insured by any type of federal or government program.

**Fraud Risk:** While Bitcoin uses private key encryption to verify owners and register transactions, fraudsters and scammers may attempt to sell false Bitcoins. For instance, in July 2013, the SEC brought legal action against an operator of a Bitcoin-related Ponzi scheme.

**Market Risk:** Like with any investment, Bitcoin values can fluctuate. Indeed, the value of the currency has seen wild swings in price over its short existence. Subject to high-volume buying and selling on exchanges, it has a high sensitivity to "news." The price has fallen as much as 80 percent in a single day.

**Liquidity Risk:** While there are times when liquidity is good and the spread between the bid and the offer can be narrow, with such large daily price swings, the spread between the bid and the offer can also be quite large. And if prices drop sharply, it may not even be possible to find a bid even close to the last trade. Trading costs in such illiquid investments should not be ignored.

#### **Taxes**

In March 2014, the IRS stated that all virtual currencies, including Bitcoins, would be taxed as property rather than currency. Gains or losses from Bitcoins held as capital will be realized as capital gains or losses, while Bitcoins held as inventory will incur ordinary gains or losses. Also note that Bitcoin is ineligible for inclusion in any tax-advantaged retirement accounts.

## **Investment or Speculative Bubble?**

I'll admit that I'm not an expert on Bitcoin. With that said I do have almost 50 years of experience in the capital markets, which includes running a foreign exchange trading operation for one of the largest financial institutions in the world, Citicorp. And I've witnessed many bubbles over the years across various types of assets. For example, silver bullion rose from \$11 an ounce in September 1979 to \$50 an ounce in January 1980. Two months later, the price collapsed to below \$11 an ounce. I've also seen bubbles in real estate and stocks (e.g., the dot.com bust). Those examples have taught me to be highly skeptical of claims that the next time will be different. And none of the arguments I've heard in favor of Bitcoin as an investment make sense to me. Let me explain why.

To start, let's agree that the block chain technology behind Bitcoin is a game-changer, and the technology will play a big role in the future. However, that says nothing about Bitcoin or any other cryptocurrency for many reasons.

First, despite the claims I hear that one of the reasons for buying Bitcoin is that there is a limited supply, this just isn't true. The reality is that there is literally no limit to the amount of similar currencies that could be created. Thus, supply could swamp demand, like printing deutschmarks in 1920s Germany. We already have competitors in the form of Litecoin, Dash, Ethereum, Monero, Ripple and Zcash. And there is nothing to say that in the future some way couldn't be uncovered to create not only more Bitcoins than envisioned, but an unlimited supply of them.

Second, in the long run, currencies only have value if governments legitimize them (in the case of Bitcoin, Japan has legalized the cryptocurrency). Clearly, regulatory agencies like the IRS could be concerned as Bitcoin likely is being used to engage in illegal activities, such as laundering money and avoiding taxes. The U.S. government could declare it illegal to transact in Bitcoins, and the whole thing might collapse. Now, I'm not saying that will happen. But one of the most basic rules of prudent investing is to never treat even the unlikely as impossible, and this certainly is possible.

Third, when making an investment, one should be able to estimate its expected return and its potential dispersion of returns, as well as its correlation to other assets, so that we can see how its addition impacts the risk/return of the entire portfolio. With stocks, we can look at valuation metrics, like earnings yield (E/P). With bonds, we can use the current yield to maturity. And with assets like reinsurance or lending, for which there are decades of data, we have historical evidence to make the appropriate estimates. With Bitcoin, none of the preceding analysis is

possible. Bitcoin is purely speculation, and smart investors don't speculate. It's important to understand that no one has yet to provide a fundamentals-based valuation model for Bitcoin. And for good reason. There simply is no tangible relationship between any economic or financial parameters and Bitcoin prices. With that said, the absence of evidence is proof of the lack of explanatory power. However, this means that Bitcoin's price currently is being driven by what may be nothing more than the enthusiasm of true believers. The risks of trying to short Bitcoin are just too great. That, in turn, means sophisticated investors cannot correct the mispricings of speculators. And bubbles happen when only one side (the optimists) is able to express its opinion about valuation. Even Isaac Newton, after losing a fortune in the South Seas Bubble, learned that while he could predict the motion of heavenly bodies, he could not predict the madness of crowds. It's certainly possible that today's sky-high prices are being driven not just by Bitcoin's enthusiasts, but also by those (perhaps residents of countries such as China, Russia, Thailand and North Korea) who are concerned by, and trying to avoid, the high risks of capital controls and expropriations. If that is the case, this certainly could be a speculative bubble.

These are all issues investors should consider if they are thinking about an investment in Bitcoins. They should also keep in mind the extreme nature of the price swings, with daily losses as high as 80 percent, and be sure they can stomach them. At the very least, investors should ask themselves how they would react if the price suddenly collapsed. Most importantly, remember that the benign neglect of cryptocurrencies by regulators can quickly turn into outright prohibition on trading and even usage.

Finally, one of the things we are most proud of at Buckingham Strategic Wealth and throughout The BAM ALLIANCE is that none of the investment recommendations we give are based on our personal opinions. Instead, they are based on evidence from peer-reviewed

academic journals. In the case of Bitcoin, there is no literature on which for us to rely. Thus, we cannot make any recommendation on whether or not purchasing Bitcoin is a good investment.

Nor is there any way to determine its value, as there are no cash flows to evaluate. In fact, we have to say that an investment in Bitcoin should be considered purely a speculation at this point. That may change in the future. But, unfortunately, when it comes to the future, our crystal balls remain cloudy.

Postscript: If you're interested in some additional thoughts on "fundamental" and "speculative" demand for Bitcoins, I'd highly recommend <u>John Cochrane's blog on the subject</u>.