INVESTOPEDIA

Winklevoss Interview: Bitcoin Payment System Worth $400 Billion

By Robert England

The bull case for Bitcoin is often expressed as an estimate of the future value of all Bitcoin in circulation once it reaches its potential. The most widely known estimate of its intrinsic value is $400 billion, made November 2013, by the Winklevoss twins Cameron and Tyler at the "New York Times" Dealbook Conference. At that valuation, Bitcoin would be worth 70 times its current value of $5.7 billion. That's based on an April 8, 2014 price of $453 per coin for the 12,620,475 bitcoins in circulation. Clearly, there's a long way to go to reach $400 billion.

So, how did the Winklevoss twins come up with their $400 billion estimate, which Tyler Winklevoss says is just "a starting point" for what it may ultimately be worth? The $400 billion estimate, he explains in an interview, is not its value as an alternative currency. Instead, it is based entirely on the ability of the digital currency to provide near zero cost transactions across the world, from the least developed to the most developed nation, from the tiniest micropayment to the largest, while its encryption and tracking of all existing coins eliminates the cost of fraud from the transaction.

"If you think of what Bitcoin's benefit is in terms of payments, it's a transaction free, borderless global payments system," Tyler says. "It's just like someone sending an email to Hong Kong. It happens instantly and free." In this way, the digital currency is superior over all current payments systems, he contends. " It replaces the intermediaries and the third party referees, it replaces all the costs associated with them with elegant math, and as a result, it reduces those costs," Tyler explains. "As a result, its intrinsic value is that it takes all those costs out of the legacy system we've known for so long."

Bitcoin ETF

The Winklevoss twins, made famous by their $140 million lawsuit in 2004 against Mark Zuckerberg, the founder of Facebook, have lately latched onto Bitcoin, forming a trust that would allow ordinary individuals to buy Bitcoin exchange-traded funds. The twins own an estimated 1% of all outstanding Bitcoins (worth $57 million on April 8).

To arrive at the $400 billion estimate, Tyler says he and his brother did a back-of-the envelope calculation of the market capitalization of some of the biggest high transaction cost players in the global payments system – the credit card companies, such as Visa, MasterCard, American Express, Discover and others. The four credit card companies named, for example, had a market cap of $333 billion on April 8. That shakes out as follows: Visa, $128 billion; MasterCard, $85 billion; American Express, $92 billion; and Discover, $27 billion.

A value of $400 billion would imply a price per coin of $32,000, based on the number of coins now in circulation (and lower as the number of coins increase over time to a maximum of 21 million- a limit designed into the protocol by the secretive creator(s) of the digital currency identified only by the presumed adopted name of Satoshi Nakamoto. The potential value will be reached over time as Bitcoin is adopted as part of the global payments network.

Tyler gives an example of the advantages Bitcoin can bring to an online merchant who sells and ships its products to customers anywhere. "If you just take, for example, Overstock.com. They accept Bitcoin," he says. "Margins [at Overstock.com] are 1% to 2% in general," he explains, referring to the thin profit margins that are common among online retailers. "And so, if Bitcoin can reduce the 2% to 3% interchange fees associated with credit card transactions by 1% or 2%, their margins have all of the sudden doubled and that's significant for any company," Tyler explains. "So, that's a tremendous value right there in payments."

The reach of Bitcoin is far greater than credit cards and requires only the willingness of merchants to accept them and consumers to use them as payment, according to Tyler. "Bitcoin can send 50 cents across the world and with the traditional system you can't do that," he says. This capability is "why people get so excited" about the digital currency's potential.

Apple's System

Bitcoin payments can be made person to person without an intermediary, which is why it is called a peer-to-peer digital currency. For most users, however, Bitcoin payments are essentially made from a pre-paid account called a digital wallet, which contains stored Bitcoins the owners of the account have purchased, usually from the provider of the digital wallet. Digital wallets function in a manner that is similar to a pre-paid credit card or savings account with checking privileges. Individuals and businesses can open digital currency accounts from providers like Coinbase, BitPay and Blockchain.info. Owners of digital wallets purchase Bitcoins from the providers, who store them and make them available for spending with companies anywhere in the world that accept Bitcoin as a form of payment.

There have been some hiccups along the way to the dream of widespread transactions via Bitcoin. Apple's iPhone, for one, departed the Bitcoin space in early February, at least for the time being, when it pulled its last remaining Bitcoin app, My Bitcoin Wallet, offered by Blockchain.info, the most popular digital wallet. The app had been available in the iOS App Store for two years. Apple is developing its own proprietary mobile payment system.

Blockchain.info's My Wallet continues as an app on the Android phone. My Wallet has transacted between $75,000 and $125,000 in Bitcoin a day over the past month and had 1,467,886 users on April 8.

Square, a merchant services aggregator and mobile payments company based in San Francisco, announced recently it would begin accepting Bitcoin for products available on its online marketplace Square Markets. Last month, however, the Internal Revenue Service announced that it would tax Bitcoin as a property, which could make every purchase a taxable event when the acquired price of a coin rises and is then spent. It could also make it extremely complicated for users to keep track of such taxable events. Merchants, for example, could not possibly know the price at which a given Bitcoin was purchased and which part of what Bitcoin was actually used among those in a given digital wallet.

Fitch Ratings, in an April 2 report, said that while Bitcoin's transaction volume has grown, it remains quite modest. In February 2014, total Bitcoin transactions averaged $68 million a day, up 10-fold from a year earlier. By comparison, at the end of 2013, Western Union averaged $225 million a day and PayPal averaged $492 million in transaction volume per day. Bitcoin volumes are tiny compared to those of credit card companies, according to Fitch. During 2013, for example, Visa averaged $19 billion a day while MasterCard averaged $11 billion a day in transaction volume.

Credit Cards

While Bitcoin entrepreneurs work toward extending the availability of Bitcoin to users and merchants, Tyler sees the legacy payments systems constrained by high costs and limited reach. "Credit cards generally only work in eight to 10 countries. And that's kind of amazing in the world today, when we consider how connected we are and how unconnected we are in regards to the payment sector," says Tyler.

The Winklevoss twins see the credit card system as a relic of the 1950s that comes with a lot of costs and vulnerabilities for consumers and merchants alike. "When you give someone your credit card, you give them so much information." For identity thieves this treasure trove of data is very attractive and the system is vulnerable to fraud. "The amount of money that payment networks spend on this fraud is all pushed back onto the consumer," Tyler says, and ultimately pushes up transactions costs. "With cryptography in a system like Bitcoin, you don't have the costs of fraud in the system any more."

Other key players in the world of Bitcoin see it as a store of value that can ultimately take part of the $7 trillion world of gold held by investors as a protection against inflation and currency devaluation. Barry Silbert, president and CEO of Second Market, estimated that 5% of investors who now invest in gold could become investors in Bitcoin as a store of value. Given that the gold market is $7 trillion, that would represent a potential $350 billion Bitcoin market size.

Others, like Wedbush Securities of Los Angeles, have estimated the high end of the valuation at Bitcoin's potential at 100 times current valuations, putting it even higher at $570 billion, based on current prices. Wedbush, however, also tags the low end at 10 times current valuations, which would be $57 billion. That lower estimate, however, would be the result of Bitcoin being overtaken by some of its competitor digital currencies, an outcome that seems unlikely today, according to Wedbush.

Winklevoss Bitcoin Trust

The Winklevoss twins have undertaken one of the most ambitious efforts to mainstream Bitcoin. Their company, Math-Based Asset Services LLC in New York, filed with the U.S. Securities and Exchange Commission last July a registration for their proposed Winklevoss Bitcoin Trust.

The trust proposal, still under review by the SEC, would offer shares to retail investors in an ETF, an approach that has also been used for retail investing in gold. The price of a share on the Winkdex, as the ETF index will be called, would be adjusted on a daily basis. The filing is going through the normal review process, according to Kathleen Moriarty, a partner at Katten Muchin Rosenman LLP, the law firm representing the twins.

The Winklevoss twins were inspired by the precious metals ETFs, which were created to enable the average person to participate in the pooled ownership of gold or silver, according to Moriarty. "It's too hard to buy a bullion bar. It's a pain to store it. There are all kinds of difficulties owning gold, more so than when you're talking about stocks." In the same vein, the Winklevoss Twins wanted to make it easier for the retail investor to own Bitcoins, which come with their own set of difficulties for the average retail investor. "So they looked at the gold ETFs as a model for the Bitcoin trust."

The Winklevoss twins claimed in their 2004 lawsuit that Facebook's Zuckerberg stole their social network idea ConnectU, which the twins and fellow classmate Divya Narendra co-founded in 2002 at Harvard when they and Zuckerberg were students. The suit was settled for $45 million in cash and shares of Facebook, then a privately held company. The twins' original 1.2 million shares grew to 6 million shares after a 5-to-1 stock split before Facebook went public. With Facebook at $58.19 on April 8, their stake in Facebook is worth $349 million.

The Bottom Line

The Winklevoss twins have become advocates of Bitcoin, planning to launch an ETF. Their $400 billion estimate of the digital currency's value as a payment system is based on the market cap of credit card companies.