



STEPPING STONES MANAGEMENT, LLC

Fourth Quarter 2017 Commentary

January 18, 2018

It was an event a year ago that presaged the biggest story of 2017's fourth quarter. In October 2016, Australia's Brighann Cotton sold 88 bales of cotton from their Texas affiliate to a client in China. It wasn't carried out in the routine way by obtaining letters of credit from the relevant banks in each country. That process has become prohibitively complex for all but the largest corporations who have their financing denied more often than not. Recently established international banking regulations require the banks issuing those letters to carry more of the risk on their balance sheets. Anti-money laundering rules also add to the red tape that has led many banks to retrench from the business leaving small and medium sized companies unable to trade internationally.

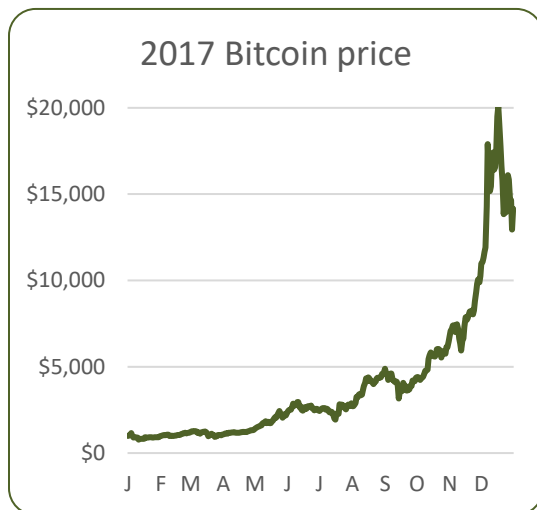
The parties in this transaction proved a concept gaining in popularity over recent years and exploding on the scene in recent months. The risks that either party had the financial and operational means to follow through on their obligations were mitigated through smart contracts, Internet of Things, and blockchain. The contracts were devised so that the bales of cotton were equipped with electronic sensors that would send signals to a message platform enabling all parties to see exactly where on earth that cotton was at any time. When it got to the destination point, the sensors triggered the smart contract to release payment in bitcoin, no humans were needed to verify and sign any documents.

The transaction proved that international trade can be conducted without the traditional layers of complexity and all the various workers having to individually carry out particular tasks. Those tasks carry fees which may now be avoidable by using virtual currencies that are recorded on a publicly distributed ledger rather than a bank's internal financial statements. This is why the bitcoin phenomenon is seen as such a threat to the international banking order and why the limited number of available bitcoins rose in value by 217% in the fourth quarter and 1,369% for 2017. That makes the S&P 500's impressive returns exceeding 6% and 19% respectively seem minuscule in comparison.

Dollarization 2.0

The astute managing director of the International Monetary Fund, Christine Lagarde, acknowledges that for now bitcoin and the blockchain technology on which it is based pose little or no challenge to the existing financial order because it is too volatile, energy intensive and not scalable. However she foresees those problems being easily fixed to where virtual currencies displace fiat money and central banks. A time when countries with weak institutions and unstable currencies adopt virtual currencies instead of stable ones like the US dollar. In what she calls a “Dollarization 2.0” scenario, virtual currencies could become more stable than those issued by central banks which could make them preferred forms of payment, putting “a question mark on the fractional banking model we know today.” In other words, virtual currencies could displace the modern financial system.

Through at least the last millennium, money was defined as a medium of exchange, unit of account, and store of value. The Brigham Cotton transaction proves bitcoin can be the first two but its volatility negates the third criteria. Some would say rising by 1,369% in a year is storing plenty of value but that rise was accompanied by six bear markets when the value declined by more than 20%. Bitcoin finished 2017 30% lower than its’ high two weeks earlier and has continued to weaken this year. If a counterparty takes a 30% hit when converting his bitcoins into whatever he needs to pay his employees, he won’t see it as a store of value and will demand to be paid in a stable currency like dollars, euros or yen.



After doubling in 2016, the dollar price of a single bitcoin doubled again by the spring and more than tripled through the third quarter of 2017. The frenzy was on as individual investors opened trading accounts worldwide at an unprecedented rate. The fourth quarter saw the world’s two largest futures markets set out to tame that volatility by issuing financial instruments that enable counterparties to hedge their exposure. By using a futures contract, someone can lock in the current dollar value of bitcoins they receive in a transaction. Futures contracts also provide a forum for speculators to trade bitcoin without having to engage in the cumbersome mining process. It is likely that the huge fourth quarter spike seen on the

accompanying chart was largely attributable to speculators taking on positions before the contracts began trading in early December. It was also attributable to the media frenzy driving price gains unseen since the 17th century Dutch tulip bulb mania.

Advocates say the limited supply of 21 million bitcoins makes them valuable from a scarcity point of view but that scarcity poses problems as mining each marginal coin takes exponentially more computing power. The number of transactions that can be processed progressively slows and under current conditions, only 10,000 transactions can be processed in a minute which Visa does in a fraction of a second. Bitcoins are mined by computers solving mathematical questions that increase in complexity with every new block on the blockchain. The rising value incentivizes

miners to deploy increasing computing power to solve the questions. The rising value also incentivizes hackers to steal bitcoins, posing another challenge to the store of value criteria.

If friends were boasting at holiday cocktail parties about how much they made in bitcoin, they are probably holding their positions on an exchange where they can easily trade in and out of it, called a “hot wallet.” That is the lowest level of security and hackers have found easy ways to compromise accounts. The largest exchange platform, Coinbase, is insured against being hacked itself but does not insure against someone stealing your password and all your bitcoins held in the account. To protect against that, coins can be stored offline in a “software wallet” which is fine as long as the computer holding the software is not compromised. Other risks pertain to the exchange that holds one’s position. The most famous case among many was Mt. Gox, the world’s largest bitcoin exchange until it declared bankruptcy after being hacked in 2014. Additionally, the purveyors of the Silk Road website learned that the illicit proceeds from their drug transactions were not as safe and anonymous as they thought when authorities traced their holdings to Mt Gox. The ultimate safety is to store bitcoins on a specially designed USB drive locked in a safe deposit box; like high tech gold.

Bitcoin has taken some of the shine off gold although the barbarous relic may get the last laugh. The gold miners ETF in the Stepping Stones Equity ETF Strategy was a laggard in the fourth quarter rising almost 2% but saw its best performance as bitcoin began to drop. The gold miners did better than the utilities and European funds as the awakened animal spirits focused on growth sectors. That also left the value fund slightly behind the benchmarks but the consumer staples and semiconductor positions both returned above 7% in the quarter. The China fund was about the same but the Japan fund exceeded 9%. Our best quarterly performers were the two energy positions as prices continued their rebound from extreme lows in 2015. Strength could be coming from the cold weather, the Saudis keeping prices high in front of the initial public offering of the state oil company, or a generally improving international economy. The fully invested ETF strategy returned 4.26% on a price basis for the fourth quarter and 15.34% for 2017 compared to the MSCI All World Index returning 4.75% and 21.84% respectively.

Coin Circulation

Christine Lagarde isn’t the only savvy player looking to solve bitcoin’s shortcomings. Other technologists have devised their own blockchains to address particular issues. Ethereum is favored for its better functionality with scripts used in smart contracts. The founder of Ripple, Chris Larsen, wanted to handle more transactions so rather than the maximum of 21 million bitcoins, he set his blockchain based currency, named XRP, at 100 billion coins and they don’t need to be mined. Ripple will dole them out from its corporate treasury at a limited pace but the founder and largest shareholder of the company has become the 5th wealthiest person on earth after the price of XRP crossed above \$3 per coin. He’s wealthier than Facebook founder Mark Zuckerberg whose product is used regularly by a quarter of humanity. Ripple gains credibility from its investor roster that includes Google Ventures and Andreessen Horowitz. American Express and several prominent foreign banks have announced plans to use the company’s services. However, they will be customers of Ripple’s clearing operations which is different from using its virtual currency to conduct transactions. That distinction gets lost in a mania though.

Special purpose funds dedicated to anything imaginable have issued their own blockchain coins as a way to raise funds. Instead of holding shares in an illiquid hedge fund, investors get virtual coins that they can sell at any time, as long as they can find a buyer. Paris Hilton has even gotten in on the action promoting digital advertising company LydianCoin. It's gotten hot enough to attract the attention of the Securities and Exchange Commission which warned "Main Street investors and market professionals" that these coin offerings and cryptocurrencies are not SEC approved securities and that they will "police this area vigorously." South Korean authorities proposed legislation last week that would halt cryptocurrency trading and China has restricted the huge computing farms that are consuming so much electricity mining bitcoins. At this writing, the value of each bitcoin has been cut in half. Like those Dutch tulip bulbs, the price probably has further to fall.

More than a threat to the banks, blockchain is a threat to the banks' employees. The Brighann Cotton transaction still needed a financier to assure the seller that the buyer was good for it. In that case it was Skuchain, a trade finance company that was able to mitigate the risks of holding the cotton while in transit by fully employing the triad of technology mentioned above. Major banks can be expected to fully embrace these technologies or lose a business that is becoming less labor intensive and more lucrative. Global shipping giant Maersk announced a joint venture this week with IBM to create a more efficient and secure platform for organizing global trade by employing the tools that Brighann Cotton used.

Although these virtual currencies are devised to mitigate risks, there are myriad risks to their current valuations. Companies like Maersk and IBM or consortia of international banks can easily devise their own blockchains incorporating their desired benefits and rendering the others obsolete. If central banks are threatened by virtual currencies, they can ban their member banks from clearing trades in them. Governments could enforce strict disclosure rules for banks handling public ledger transactions. Or most wildly, as JP Morgan chairman Jamie Dimon speculated, the whole bitcoin chain could be an ingenious fraud devised by its mysterious creator who is only known by the pseudonym Satoshi Nakamoto. Dimon has since softened his tone as his bank is surely working on its own blockchain.

The late Nobel economist Milton Friedman regularly advocated replacing the Federal Reserve with a computer; blockchain could be the answer to his wish. Promiscuous central banks printing money without limits have damaged their own credibility. Negative interest rates and bank failure "buy-ins" as happened in Cyprus have driven the world to seek alternatives to the central bank monopoly on money. Although many advocates are turning skeptics when they find their bitcoin accounts emptied by hackers, distributed ledger virtual currencies will certainly be part of the world's financial system. That is why so many smart people have taken positions. However, like so many first movers and those tulip bulbs from 400 years ago, we think the current valuations will be looked back upon as foolish.

Even as the bloom seems to be coming off the bitcoin rose, the US stock market continues to power through successive record milestones. The recent tax reform law will provide a boost to corporate earnings over time although initial effects have been large impairment charges to the value of corporate deferred tax assets. Several international corporations have announced plans to invest foreign held funds back into the US which will provide an economic tailwind along with

more money falling to bottom lines. A strengthening economy should help earnings but current valuations have sprinted ahead of the improving fundamentals. Although dwarfed by the rise in bitcoin, the stock market also sits at historic deviations from average prices and valuations. Incoming Fed chairman Jerome Powell's promise of tighter money is the most salient threat to stock prices so we remain cautious despite a long awaited return of animal spirits and better economic growth. We continue to weigh all the crosscurrents and look forward to hearing from our new Fed chairman about his plans to unwind the historic monetary expansion of the last decade.

Please feel free to contact us with any of your financial concerns. Until then and as always, thank you for your trust and thank you for your business.

Yours truly,

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