



Cryptocurrency and Sociology (October 2017)

Choose Your Retirement and Estate Risk: Volatility or Money Debasement?

Most observers consider cryptocurrency to be a technological innovation. Certainly this is true. Yet some technologies actually change the way society is structured, and cryptocurrency is arguably such an innovation. One would think that this would be self-evident in the investment world, yet cryptocurrency is not accepted even as a legitimate investment.

This lack of acceptance is because modern portfolio theory defines risk as price volatility. Anyone observing cryptocurrency upon the most casual basis will immediately realize that it is far more volatile than even the most volatile equity segment. However, in a historical, rather than day to day or year to year context, the great investment issue has never been the control of volatility; it has been the retention of purchasing power or, stated differently, a defense against the erosion thereof. This is the contest of the unending efforts of governments—either with, or even without, the assistance of a central bank—to debase the value of money against the struggles of the citizenry to resist debasement.

The history of government monetary policy, domestic and foreign, recent and ancient, provides a mind-numbingly endless series of examples of currency debasement, all telling the same story.

- The Roman Empire provides 2,000 years of examples of successive debasements of their coins. For instance, during the 73 years between the end of the reign of Marcus Aurelius in 180 CE to the beginning of the Emperor Gallienus in 253 CE, the denarius silver coin was debased from 75% silver to only 5%, which was just a surface coating that would wear off. That is 93% depreciation, which works out to about 3.6% per year.
- Interestingly, in the U.S., in the 73 years from 1943 to 2016, the inflation rate was 3.67% per annum, which means that the dollar also lost 93% of its purchasing power. For most of that period, though, a U.S. citizen could earn a comparable yield on his or her savings from their bank deposits or treasury bills, so that purchasing power could be maintained if the cash was held within the financial system and not under the mattress or in the bookshelf. That has not been the case, though, over the past decade, since short-term interest rates have been kept near zero; money held in the system really is being eroded.

An integral part of that monetary history, though, are repeated examples of how certain items of fixed supply – that is, which were reliably scarce – have provided a remarkable degree of investment return. As we will see, though, that value creation might not be appreciation per se so much as the simple retention of value versus the depreciating currency in which that item is denominated.

This is in accordance with Sir Thomas Gresham's principle, now considered to be a law of economics, that bad money drives out good. This is why the Liberty dime, which has not been minted since 1945, can be had for about \$72 each. This is a 72-year rate of return of 9.71% per annum. If silver coins were an asset class, they would compare quite favorably with any type of fixed income investment and most forms of



equity. And this is despite the fact that the supply of silver is constantly increasing and is now priced at \$17.50 an ounce; whereas, it traded in excess of \$49 in 1980.

Or, there is a 1909-S Indian Head penny. Rare coin website CoinTrackers.com estimates its value, even if only in average condition, at \$600. That represents a compound annual rate of return of 11.63%. In any case, it is far superior to the return of \$1 from 1909 to the present.

It is simply astonishing that a 1909-S Indian Head penny, collecting no interest, could dramatically outperform every bond index or fixed income index within reason, as well as the S&P 500 Index. That Indian Head penny escaped the debasement power of the government, because it stopped being issued and, in an operation of Gresham's Law, individuals withdrew them from circulation and saved them for their scarcity value.

In a parallel manner, cryptocurrency essentially bypasses or renders obsolete the control of the value of money by central banks or governments. It is the veritable embodiment of the idea of social change as expressed by the inventor and social theorist Buckminster Fuller. Fuller stated that: "You never change anything by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."¹

Lately, bitcoin is suspected of being on the verge of failure for any number of reasons. The most recent concern relates to a "fork" on the Bitcoin Network that resulted in a new currency known as Bitcoin Cash, which occurred on August 1, 2017. From that point in time, there exists this altered version of the blockchain or distributed ledger and there are now two currencies: bitcoin and Bitcoin Cash, both of which adopted the concept of fixed issuance to the level of 21 million currency units and no more issuance beyond that point. As of the date of this writing, only 16,625,563² bitcoins exist. Only another 4,374,437 will be produced between now and the year 2140. That is the monetary policy, and it is a fixed-supply policy.

The virtue of a fixed supply doesn't only apply to bitcoin by itself, and it appears to us that there is a completely different return possibility for Bitcoin Cash. Our commentary relating to Bitcoin Cash is available at <http://horizonkinetics.com/cryptocurrency-research/>. Hopefully, if nothing else, a vigorous discussion of the merits of cryptocurrency or lack thereof will restore the focus of the investment debate from a study of volatility to a study of purchasing power.

¹ WikiQuote

² As of October 14, 2017



Cryptocurrency: Riskier or More Secure?

A blockchain is the distributed, transparent ledger of all of a cryptocurrency's transaction history and ownership records. It was invented to solve the authentication problem of a currency issued without government intervention. It needed to be uniquely secure from the beginning. It is secure inasmuch as there is no central point of failure. The blockchain ledger is duplicated via each node of the network, so each has a complete and proper record. In order to be hacked, each node must be simultaneously penetrated in a narrow window of time between blocks. The mere location of all of the nodes is almost impossible to know. If someone could somehow identify all of those nodes, then before one could hack the system, one would need to decrypt the various encryption algorithms, solve an elliptical function before all of the perhaps hundreds of thousands of servers could do so, and simultaneously disguise the fact one would be using the truly enormous amount of electric power required to perform this task. Hiding its power usage would be an important step since, without it, the hacker would be immediately identified.

In any case, the blockchain technology is infinitely more secure than the central database model, which is the model currently being used by all of the large financial institutions and financial database firms. That model has one point of failure. Large-scale breaches of security and theft of data routinely occur, including the recent theft of data associated with perhaps 143 million active credit cards. The most elemental function of a financial services firm is to hold secure the assets of its client base. The financial industry is failing at this function. A blockchain-based cryptocurrency is simply far more secure.

If it is indeed true that the blockchain is far more secure than a bank, it would logically follow that customers eventually will prefer to keep funds on the blockchain of a cryptocurrency, particularly if they could be confident of privacy, security, and the knowledge that their savings will not be debased. If customers decline to deposit money into banks, this would mark the beginning of the end of fractional reserve banking as it has existed for about 800 years. It would greatly lessen the power of governments and central banks.

Many observers can readily see this possibility. It is for this reason that some assert that governments will make cryptocurrency illegal, and that assertion has become more prominent in some circles. We will address this topic in our next report.



Disclosures:

Past performance is not indicative of future results. This information should not be used as a general guide to investing or as a source of any specific investment recommendations. This is not an offer to sell or a solicitation to invest. Opinions and estimates offered constitute the judgment of Horizon Kinetics LLC ("Horizon Kinetics") and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions.

Under no circumstances does the information contained within represent a recommendation to buy, hold or sell any security, and it should not be assumed that the securities transactions or holdings discussed were or will prove to be profitable.

Subsidiaries of Horizon Kinetics manage separate accounts and pooled products that may hold certain of the instruments mentioned herein. For more information on Horizon Kinetics, you may visit our website at www.horizonkinetics.com. No part of the research analysts' compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analysts in the research report.

All material presented is compiled from sources believed to be reliable, but no guarantee is given as to its accuracy. No part of this material may be: (a) copied, photocopied, or duplicated in any form, by any means; or (b) redistributed without Horizon Kinetics' prior written consent.

©2017 Horizon Kinetics ® All rights reserved.