Digital Currency Exchange Rates and the Law of One Price

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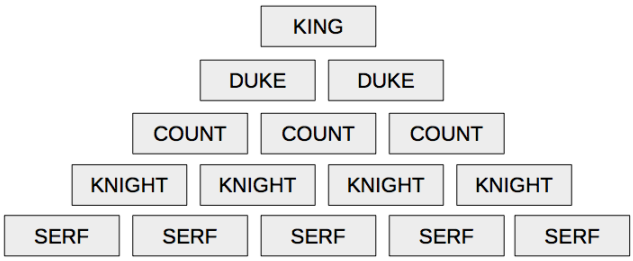
Background

Many years ago, the Western world lived under feudalism. People in the Middle Ages formed small communities around a central lord. Most people lived on a manor which consisted of the castle, the church, the village and the surrounding farm land. These manors were isolated, with occasional visits from peddlers and soldiers from other fiefdoms. Money was of limited use in such a system and fiat currency did not exist.

The king awarded land grants or "fiefs" to his most important nobles, barons and his bishops, in return for their contribution of soldiers for the king's armies. At the lowest echelon of society were the peasants, also called "serfs" or "villeins." In exchange for living and working on his land, known as the "demesne," the lord offered his peasants protection. The hierarchy was king, nobility, men of war, craftsmen, merchants, money lenders, peasants and serfs. Note how low on the totem pole the bankers were, because money was not the definition of power. Everybody was locked in place from birth: tribute (wealth) flowed up through the ranks while favors and protection trickled down. Like Don Corleone, feudalism made an offer that could not be refused. It was a staid, medieval system derived from land ownership. To this day, the Catholic Church remains the world´s largest land owner.



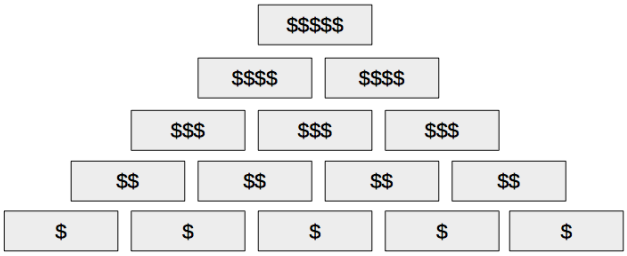
Feudalism made sense during the Dark-Ages. Population growth was kept in check by the low productivity of labor, high infant mortality, plague and famine. Hundreds of fiefdoms struggled amongst themselves for the spoils of war. Before the Age of Discovery around 1500, land was scarce. New World colonies provided the Primitive Accumulation necessary for the Industrial Revolution to start in England, rendering Feudalist relations inefficient.

Feudalism evolved into Capitalism, a less centralized, far more efficient means of organizing production and distributing goods. Adam Smith wrote about its charms in 1776. In the 19th century, great leaps in science and technology produced a revolution in production and transport that relied not on animal power, but on seemingly inexhaustible coal, oil and natural gas. This reliance continues today. The increase in the productivity of wage labor turned chattel slavery, the last vestige of Feudalism, into a brake on further economic development. In the Industrial Age, the economy would grow vertically via productivity. Hydrocarbons turned the iron wheels of industry, allowing population to increase exponentially. In the 20th century, a new financial system, fractional reserve banking, printed brand new money as every new loan was made. This means that the money to lend came into existence when the loan itself was

made. Borrowing from the future stimulated growth in the present and this too seemed inexhaustible. Economists considered time as a new dimension growth. The first dimension was horizontal through territorial expansion. The second was vertical through mechanization and the third was time, by compressing the future into the present (debt). Loans were repaid with % interest or rolled over into new loans (refinancing). Economic growth is crucial to such a system.

A government may repay old bonds by issuing new bonds indefinitely because it has taxing authority. This is smart if interest rates have fallen or the national currency is appreciating. The purpose of debt and deficit spending is to enhance productivity today that will grow the economy such that the cost of debt servicing will be more than absorbed by the economic growth achieved as a result of taking on the debt. Consumer debt is something else. All countries and corporations must make sufficient capital investment or they will fall behind and go out of business.

In the 18th century Mercantilist new world order, feudal relationships broke down, to be replaced by a new paradigm in which the owners of capital were in competition with wage labor for the value created by production. In the 20th century, the labor movement and threat of Communism resulted in a large middle class, but automation and offshoring have eroded their numbers and they are no longer needed now that the Soviet system has been discredited. A new aristocracy has congealed without titles of nobility. The global system is based on net worth, celebrity and consumption. The quantity of US dollars people control and can spend on themselves is what defines success and power in the Age of Bankism:



Bankism is financialization of the Capitalist economy. Industry decays. Asset bubbles and credit replace income growth. Increasing restrictions on people, their property and their money require an ever expanding tax, police and nanny state. Conflict and litigation thrive. The problem of Bankism is its centralization of economic and political decision making. Financial markets are manipulated to achieve political goals, creating distortions in the allocation of capital. Bankism benefits oligarchs and king makers who exploit their asymmetrical access to information (e.g. Addelson, Bloomberg, Koch, Soros) to concentrate enormous power in their own hands and impose domestic political and foreign policy agendas. Bankism, a form of oligarchy which masquerades as free enterprise, prevents the creative destruction mechanism inherent to Capitalsim, so that inefficient firms that should not exist continue to do so at taxpayer expense. Bankism favors a class of well connected insiders (the 0.01%) over the invisible hand of the market in a heads I win tales you lose arrangement. Feudalist

relations are coming back. Money is the (not so new) God and control over all money, whether they own it or not, is a prime obsession of the oligarchs.

Value, Price and Exchange Rates

All energy is sold in US dollars and we can think of the dollar as a unit for the exchange value potential of oil and uranium in the ground. In earlier times, the dollar represented slightly more than its weight in gold. Paper money is scrip that used to represent gold held in vaults just as digital coin is scrip for paper money printed by governments. This means that digital currency like bitcoin is not inherently valuable, nor is it backed by gold bullion; rather, it mimics the digital dollar but bypasses the centralization imposed by Bankism. Some people will be offended by this statement, but it is true and I will prove it.

Swiftcoin, a digital coin named in honor of the SWIFT network, looks to the value of electricity as a proxy for the value of energy. **Its exchange rate is based on its free floating market convertibility with other currencies, including bitcoin.** The US dollar as a universal unit of account is used for accounting because commodities are denominated in it.

There is a **lot of misunderstanding** about the value of digital coins such as bitcoin. It is not the total amount of coins in existence that determines value, rather, it is the amount of coins in circulation relative to the **actual goods and services** those coins can obtain. If one coin can obtain what one dollar can obtain, it is tantamount to one dollar. If it buys only 75% of what a dollar buys of a standardized thing, it may exchange for 75 US cents. For governments and businesses, the ultimate role of a currency is to pay expenses, including taxes. So, privately minted crypto-currencies cannot achieve the liquidity of fiat currencies. However, crypto-currencies can compensate by being more liquid in commerce, tapping into the self-interest of individuals and corporations to control their own banking.

The hourly and daily zigzags of aggregate demand within an economy do not result in exchange rate volatility...they result in consumption and price swings. It is trade **between** economies, interest rate differentials and **speculation** that move exchange rates, otherwise known as forex markets. Taken in a vacuum, an exchange rate has nothing to do with the utility of a currency; rather, an exchange rate is a balanced equation (one side equals the other side). Take one Japanese yen. It is worth far less than a US cent, but it is a mighty currency that moves markets, especially gold. The Japanese yen is among the three strongest currencies in the world. Why? Because the yen commands a wide range of **real** goods and services that the world depends on. The world needs yens to buy those things because the corporations that make Japanese products have to pay their taxes in yen. 96 yen may be exchanged for one dollar, but if we move the decimal point to the left two places, one dollar is now worth only 0.96 yen. Nothing changed except for the accounting. Ditto the Chinese Yuan. As export oriented economies, they benefit by currencies that decline in exchange rate because their products become more competitive on the world stage. On the other hand, because the US dollar is the world reserve currency, the United States is expected to run a trade deficit, i.e. buy more than it sells from other economies. Why? Because if the balance of trade were equal, then countries could not accumulate dollars, which they need to back their own currencies with, as well as purchase commodities not sold by American companies, especially oil. Those dollars are held in the form of bonds. If the dollar

declines, it will cost the United States less effort to service its debt, so here too, it benefits from a falling currency. Then again, imports will be more expensive.

Dollars, Pesos and Bitcoin

The world is not fair. Take the United Nations. A few countries have a veto but most do not. In the euro zone, Germany can do what Greece cannot. Different rules apply to different economies and nations because they are not equal. The valuation of a company or a commodity or currency is part finance but mostly sentiment. Economics is not all mathematics and it's not rational. So it is with digital coin.

There is a currency crisis in Argentina. The currency usually loses value, making prices rise. The response has been to outlaw price increases. This has been going on for 50 years. Wages go up along with the cost of living, increasing the cost of doing business, so prices rise even more, and so on, over and over and over. The cycle continues until the velocity of money is so slow that higher prices no longer cover higher expenses because consumption (aggregate demand) has slowed to a trickle. Now, high prices stagnate. There are few buyers, workers are let go and producers go out of business. Inflation is sticky. Once prices rise, they tend not to return to prior levels even after costs have gone back down and even when there is no demand. The Law of Supply and Demand stops working.

The official Argentina exchange rate may be 8 to the dollar but it is 13 on the street. There are too many Argentine pesos chasing too few goods and services and nobody has any confidence in the future. A bank account may pay 18% interest. Across the river in Uruguay, a country more than ten times smaller than Argentina, the peso is trading at 26 to the dollar and there is no black market. Interest rates may be 2%. Is the Argentine peso outperforming the Uruguay peso? No, the opposite is true, the Uruguay peso is much stronger. Lesson: the number of one currency that fit into another does not tell you how strong it is.

After years of observation, I have concluded that Argentina needs to adopt the US dollar as Ecuador has done, but this would halt deficit spending. Governments are loath to be constrained in their budgets so they don't do it. How did the "one to one" peso to dollar peg work out in the nineties? One peso to one US dollar was always a naïve, greedy fantasy, but the direct cause of the crash that wrecked the country was that Argentina did not follow the currency board rules. It secretly issued excess dollar bonds and inevitably, the peso collapsed. Menem´s foolish one to one mirage gave Argentines the good life for about ten years while Argentine manufactured goods were rendered unsellable abroad, resulting in permanent de-industrialization.

Argentine finance ministers have not understood economic basics. Deficit spending fuels inflation and poor fiscal, monetary and trade policy hamper economic activity in spite of the very best of intentions. It appears that the current administration in Buenos Aires believes that the way to contain inflation is by not printing paper bills above 100 pesos while exchanging Roca`s portrait for Evita`s.

Argentines are very interested in bitcoin to circumvent capital controls and provide refuge from the peso. The Argentine government should take notice that outlawing

bitcoin cannot stop its use. This is true in all countries. Governments would be wise to adopt digital currencies before they fall hopelessly behind their citizens.

What is Bitcoin?

Bitcoins are digital units of currency that one can use, via the Internet, to buy goods and services. The digital nature of bitcoin is not what makes it revolutionary. Indeed, there is a large array of digitalized currencies, including dollars, euros, frequent flyer points, Amazon points, etc. Over 90% of dollars, euros and yen exist in digital form only. For instance, your bank balance appears as digits on an ATM screen. When you use debit/credit cards to pay a bill, your dollars, euros and yen come and go as mere digital currency units. Only a tiny portion of fiat money takes on paper or metallic form.

When an airline rewards frequent flyer miles it creates a digital unit of value that accrues in order to stimulate purchases. Similarly, when the European Union created a carbon market to fight climate change, a digital stock of carbon was created by fiat, then allotted to companies that could then buy and sell it in financial markets. The less carbon companies produce as waste, the more digital carbon units they may keep. Hitherto this scheme, carbon was an externality. Market forces are harnessed to reorder incentives, including the ability to resell carbon coin (credits).

Bitcoin was not novel because it is a digital currency. What *was* genuinely novel about bitcoin is that no centralized authority (like Paypal) approves or denies transactions and the public can see the record of activity (ledger) called the block chain because proof of work substitutes for account management. But there is a caveat: protection against double spending can be defeated if a certain percentage threshold of bitcoin ownership is concentrated in too few hands.

It is clear that this model is in conflict with Bankism and its concentration of power in a few hands.

Now consider gold coins. By their nature as a commodity they constitute an anonymous, private and dependable medium of exchange and store of value. If I use one to buy something, I shall end up with one less such unit of gold. The great challenge of creating a non-physical, wholly digital, currency is the pressing question: *If a currency unit is a string of zeros and ones on my hard disk, who can stop me from taking that string, copying and pasting it as often as I want and become infinitely 'moneyed'?*

Until bitcoin's emergence, the conventional wisdom was that to make a non-hyper-inflationary digital currency possible, a Ledger of Transactions, keeping track of each unit, must be kept by some authority, e.g. the Fed, ECB or Visa. Bitcoin changed this forever. Proof of work achieves this. Swiftcoin is designed the same way.

Bitcoin appeared in 2009 when someone using the pseudonym Nakamoto posted an algorithm on an obscure listserve that made something remarkable possible: a unique string of zeros and ones ensured that, before digital coin could be transferred from one

wallet to another, a minimum number of wallets would confirm the coin´s authenticity. The problem of double spending had been solved.

Moreover, the algorithm was written to allow for the steady "minting" of new strings, i.e. bitcoins, over time. Lastly, to cap the supply of bitcoins, the algorithm had an upper limit of 21 million units. Once it reached that quantity, no more could be produced. Meanwhile, the cost of bitcoin mining would rise as the quantity of bitcoins increased, compounding the first mover advantage already enjoyed by early bitcoin enthusiasts.

The developer of the bitcoin algorithm believed in a crude version of the 'monetarist' *Quantity Theory of Money* (i.e. the idea that the value of money depends solely on the quantity of the money supply) and though he had made the digital equivalent to gold.

Everyone knows gold is rare, so bitcoin too would be rare, although artificially (by design of its algorithm) to 21 million units. And just like gold, there are two ways in which bitcoins can be acquired: One is to buy them. The other is to 'dig' for them like 19th century gold diggers. To that end, Mr 'Nakamoto' designed his brilliant algorithm in a manner that allowed for "bitcoin mining."

Wouldn´t it be ironic if one day it is revealed that "Satoshi Nakamoto" is really a bank or government? After all, TOR was developed by the U.S. Navy and they continue to fund it.

The Bitcoin Exchange Rate

In 2011, I got my first bitcoins. Back then, the Mt. Gox home page looked like the handiwork of a teenager. Reluctantly, I left Fukuoka on the Shinkansen and went to Tokyo in the wake of the Fukushima catastrophe. I went to Shibiya-ku and met Mark Karpeles and his staff at Mt. Gox. They dreamed about bitcoin breaking the $10 dollar barrier... I tried to explain economic concepts to them but it was no use. Since they had millions of bitcoins, every small jump in the exchange rate increased their net worth (and pulse) by a large amount.

A few years later, bitcoin skyrocketed to over $1200 but Mt. Gox was bankrupt and thousands of people were devastated. How can this be explained? Shouldn´t Mark Karpeles have been a billionaire and shouldn´t have all the other holders of bitcoin been millionaires? By the way, why did so many people have their bitcoin fortunes at Mt. Gox instead of in their own bitcoin wallets on their own computers?

A few years after the Mt. Gox bust, the same thing played out again as other exchanges went belly up and a lot of people lost a ton of money. Then bitcoin tanked, settling in a range between $200 and $300. This means that in addition to all the people who lost their shirt, anybody else who bought bitcoin above $300 and kept it, and anyone who accepted a bitcoin as payment greater than $300 and kept it, are now underwater. This includes Tim Draper, the legendary venture capitalist who knows more about finance than just about anyone.

Comparison between the exchange rate of the **same currency pair** at **different points in time** can tell us something about currency health, but one shoe size does not fit all, much depends on the *specific* currencies and the reasons for the change. It's a complicated topic beyond the scope of this paper. A whole book could be written about this, but I will make just a few points:

The rise and fall, past, present and future, of the bitcoin exchange rate, has everything to do with euphoric speculative money and little to do with the utility of bitcoin, which is real and does not need validation by bubble. The only reason the bitcoin exchange rate soared is because of the expectation that it would soar even higher. It was musical chairs. In this regard bitcoin followed in the footsteps of the Tulip mania, the dot com bubble and condo flipping. The mining of bitcoin does not create new wealth any more than printing paper money creates new wealth. **Buying a bitcoin for x and selling it for 10x does not create 9x, it just subtracts 9 x from somewhere else**. The much ballyhooed "mining" and "limited number" of bitcoin is a matter of decimal point placement, not wealth. I can make a piece of paper with unique attributes, cut it up into 100 smaller pieces and honestly say they are scarce, because I made them that way. But their value comes from social validation because these pretty pieces of paper have no innate utility until they are exchanged for something that really does. It is precisely this ability to stand in for something else that "creates" new wealth for holders of digital currency. The analogy of bitcoin with gold bullion as a scarce commodity is a false cognate but works marketing wonders to get the public on board. The properties of gold, one of the elements on the Periodic Table, lend it great emotional appeal as a status symbol and utility as an industrial metal. It does not tarnish or corrode. It is very labor intensive to acquire and put into useful form. There is no substitute for it.

This makes it very expensive to buy. An artificially scarce crypto-currency can and will be met by other limited issue crypto-currencies until there is an abundance of scarce crypto-currencies. New companies and their stock symbols can be added to the NASDAQ every day, each one of them unique and limited in supply. In the nineties, when Maria Bartiromo mentioned a dot com, a fortune could be made that afternoon. As with stock trading, insiders and early birds are winners and those who arrive late to the party are losers. Unlike stocks, there is no price to earnings ratio, cash flow, dividends or underlying assets, i.e. wealth, to justify the fantastic bitcoin exchange price. The bitcoin exchange rate is a social and psychological phenomenon.

The real utility of a crypto-currency is its ability to replace banking, enhance commerce and lower the cost of doing business by substituting the dollar. Wealth is created when productivity increases or costs are reduced, not when an exchange rate moves. Redistribution of wealth upwards occurs when weak hands pay dearly for what insiders got on the cheap. This gives the illusion of wealth creation to those who come out on top. Unless they cashed out with great timing, the real net worth of bitcoin millionaires was not what they believed. They deceive themselves like the Argentine peso millionaires during the "one peso for one dollar" folly of the 1990s.

As with all things digital, there are security concerns. Imagine a world that has shifted entirely to bitcoin. Would we not live in fear that some ingenious hacker will get the better of Nakamoto's algorithm and manipulate it to his benefit? Would it be wise for people to simply assume that the bitcoin algorithm is un-hackable (especially so in the absence of some authority that can intervene and save the day if something horrible happens to the algorithm)? Besides, even if the algorithm is safe, there is always the danger of waking up to the realization that one's bitcoin stash was looted during the night. And if one entrusts one's stash to some company with better firewalls and computer security, what happens (in the absence of a bitcoin Central Bank) if that company goes broke or simply disappears into the Internet's darker crevices with its customers' bitcoins, a la Mt. Gox?

These concerns would probably suffice to put a dent in bitcoin's prospects. But they are not the main drawbacks of the currency. There are two insurmountable flaws that make bitcoin a highly problematic currency: First, the bitcoin social economy is bound to be typified by chronic deflation because of the 21 million unit limit. Secondly, we have already seen the rise of a bitcoin aristocracy which, besides the issues of distributive justice which it raises, evokes serious fears about the capacity of very few entities or persons to manipulate the currency for their own benefit. Let us look at these two problems in some detail.

First, deflation is unavoidable in the bitcoin community because the maximum supply of bitcoins is fixed to 21 million and approximately half of them have already been 'minted' at a time when very, very few goods and services transactions are denominated in bitcoins. To put it simply, if bitcoin succeeds in penetrating the marketplace, an increasing quantity of new goods and services will be traded in bitcoin. By definition,

the rate of increase in that quantity will outpace the rate of increase in the supply of bitcoins (a rate which, as explain, is severely constricted by the Nakamoto algorithm). In short, a restricted supply of bitcoins will be chasing after an increasing number of goods and services. Thus, the quantity of bitcoins chasing goods and services will fall, causing deflation. And why is this problematic for commerce? Because an expected fall in the bitcoin exchange rate motivates purchasers to delay expenditure (why buy something today if it will be cheaper tomorrow?). Secondly, a steady fall in average prices will translate into a constantly shrinking profit margin for firms accepting bitcoins unless they can swap them out for dollars immediately in a game of musical chairs.

In addition, two fault lines have developed, quite inevitably, within the bitcoin economy. The first divides the 'bitcoin aristocracy' from the 'bitcoin poor', i.e. from the latecomers who must buy into bitcoin at exorbitant prices. The second fault line separates the speculators from the users; i.e. those who utilize bitcoin as a means of exchange vs. those who see it as a betting opportunity. Volatility is baked into bitcoin's cake. While it is true for all currencies that there is always some speculative, as opposed to transactional demand, in the case of bitcoin speculative demand outstrips transactions demand by a wide margin. And as long as this is so, volatility will be off the charts and deter those who might have wanted to enter the bitcoin economy as users (as opposed to speculators). Thus, just like bad money drives out good money (Gresham's Law), speculative demand drives out transactional demand.

Can these flaws be corrected? Would it be possible to manage the supply of digital currency in such a way as to sidestep the deflationary effects described above while tilting the balance in favor of transactional demand?

The answer is yes. Enter Swiftcoin.

This decentralized, peer-to-peer digital money and payment network uses cryptography and proof of work, rather than a central authority, to enable confidential trader communication and seamless payment for commodities such as gold and oil. By backing the digital currency (i.e. making it easily convertible) with a fiat currency or a commodity that does not need to actually move or change hands, it can perform the dollar utility without use of banks. The Swiftcoin wallet decentralizes money transfers, renders a bank account, a Paypal account or any kind of account unnecessary and makes commerce, not just e-commerce, far more efficient. According to economic theory, the most efficient product or service will drive costs down and, all else being equal, outperform the competition to become the new normal.

The Swiftcoin Exchange Rate is Set by the Free Market

Swiftcoin, like bitcoin, is limited in amount by design but, as we have seen, this point is **obsessed over**, revealing a naïve understanding of economics. Every digital coin in circulation was, by definition, traded for something of value and that value has nothing to do with how many other digital coins were "ladies in waiting," hoping for a suitor.

Consider the life cycle of a digital coin. It is "born" inside a computer then exchanged for something else ad infinitum until it is permanently lost, e.g. a computer with crashes and no backup wallet exists. This is the equivalent of paper money that is worn out. It was the initial exchange with **something** that brought every paper note and digital coin into use. Whether there are a thousand or a billion of the coins or paper notes does not make each one more or less valuable. The amount of water in the Pacific Ocean has no bearing on the value of bottled water in Paris and one brand of water has the same utility as any other brand. This is the hallmark quality of a commodity. It is demand that drives the price of bottled water, not the scarcity of bottles in stockrooms. If demand falls off, prices will fall. If bottled water is sold illegally, demand will still be affected and prices will fall. If bottled water is "fake," i.e. tap water, demand will still be met while possibly cheapening the brand (inflation). At the end of the day, water is water and it acts like a commodity. If too much bottled water is chasing too few consumers, the price will fall, no matter how many bottles of water he has or could potentially "manufacture." He could, however, stimulate sales by advertising and getting celebrities to use his brand in Hollywood movies. But I digress.

Now consider wine. It can be mass produced and table wine acts like a food commodity. After all, its main ingredient is grapes. But not all wines are created equal. Some rarified bottles may sell for $50,000. They may be centuries old and have belonged to Napoleon Bonaparte. The truth is that some people feel better about themselves by showing off to their friends that they can pay that much, then drink the wine while they watch in awe. They may see the spectacle as an investment that will cause a sensation that helps their career and social life. They are being emotional and **consuming** a luxury good that is priced the same way luxury rental markets are, i.e. by the end **user´s ability to pay**.

Did $10 table wine, a commodity, increase in value because somebody paid 50k for a bottle? Did bitcoin, a commodity (one is identical to another), increase in value because somebody paid $1200 for one?

Digital coins, a commodity, not a consumer product, are subject to the same laws of economics as anything else. Their exchange is guided by the invisible hand. The currency backer and others may want a certain outcome but they can't control it. If the issuer swaps coins into circulation via trade of goods, the counterparty (seller) must be amenable to such a deal. If there is little or nothing to be gained by accepting the coin, the seller won´t agree, regardless of how "scarce" the coin is.

The Bitcoin issuer cleverly sidestepped this concern by creating the “Satoshi Nakamoto” mythology. All eyes are on the computer code, which extremely few people have the ability or time to understand well. An illusion was created that no interested party created and manages the currency. Somehow, brilliant computer code dispels asymmetry of information, first mover advantage, the euphoria of crowds, deflation, Gresham´s Law, etc. In fact, the rise and fall of bitcoin mimics a company share, especially a dot com.

So let us consider a company share as a proxy for digital currency.

A company is taken public and its shares are offered for sale. The valuation of the enterprise divided by the number of shares should yield the stock price. The number of shares is a known quantity. The company could emit more shares and theoretically the price per share will fall. But if the company valuation, a very subjective number, increases while new shares are offered, the share price could remain unchanged. This is tantamount to the circulation of more digital coin to exchange for more goods and services on offer (a growing economy). More widespread circulation of coin does not necessarily spell debasement.

Now suppose a company buys back its own shares. The price per share will rise and everyone will be impressed but did aggregate value increase, i.e. did the pie get bigger? No. It took shares out of circulation to make them “scarcer.”

The Law of One Price applies: an arbitrage opportunity will arise if an interested party tries to force prices. Price discovery is the mechanism by which free market forces decide what the digital coin exchange rate will be. The private issuer of a currency, like the private issuer of shares, does not have the wherewithal to dictate the exchange rate with other currencies because the cost of doing so would cancel out the benefit. Ultimately, a currency, like a share, has to stand on its own two feet.

Interest Bearing *Solidus Bonds* Drive Demand for Swiftcoin

The world needs something that can convincingly represent the value of commodities in a stable fashion, yet overcome the drawbacks of having them. The answer used to be the dollar. But in an age when Bankism has superseded Capitalism in the West, cash has taken on the drawbacks of a commodity: risky to keep on hand but risky to entrust to third parties; subject to confiscation in banks and while transported on roads or airways; cannot be used without the permission of third parties who take their cut without offering any value-added service. Finally, cash on hand and in banks does not pay interest and is subject to inflation and devaluation.

To a limited extent, bitcoin solved these challenges but it brings a new one: the bitcoin exchange rate. Because of its volatility, any seller who accepts bitcoin faces huge devaluation risk unless he can, within hours, convert his bitcoin into dollars, but this cancels out some of the key advantages of using a digital currency in the first place. The Gulf countries discussed bitcoin and concluded that there is too much uncertainty about the exchange rate for it to be of use in the oil trade. They also expressed concern about the failure of bitcoin exchanges like Mt. Gox.

All commodity markets rely on the electronic dollar as a medium of exchange, electronic ledger keeping and SWIFT payments managed by computer networks controlled in Brussels, the key choke point. This creates bottlenecks that give large banks and the tiny, rapacious elites who control them, unilateral veto power over any transaction or person they don´t like. As there is no alternative to the dollar system, those who control it never lose out; they tend towards absolute power and their absolute power has corrupted them absolutely. The world cries out for a solution. Decentralized, privately minted digital coins and bonds are the answer. Since decentralized planning and production are more efficient, instruments like Solidus Bonds will become the norm. **Solidus bonds** make credit rating agencies (another chokepoint) obsolete and commerce outside the dollar system deals a body blow to the compensatory power of the banking cartel and their ability to buy governments and politicians. The self-appointed masters of the universe are far less able to dictate their interests, their politics and their will to the rest of us.

Digital currency bonds are the solution. Team Daniel Bruno has launched the Solidus Bond after three years of development at **www.solidusbond.com**

Solidus Bonds have maturities of 30 days to ten years and pay the coupon in digital currency to the holder of the bond. All coupons are paid every 30 days until bond redemption in peer-to-peer, digital currency. Interest payments and bond redemption are executed by algorithm without human intervention, making default impossible. Bond duration is reduced.

The bond is a **digital bearer bond** with ownership conveyed by possession. The bond can be issued in any amount down to three decimals by pointing and clicking the Solidus Bond folder of the Swiftcoin wallet obtained for free at **www.swiftcoin.cash**

Bond purchase and sale do not require a broker and are commission free. Once purchased, the bond can be transferred to any other Swiftcoin wallet at will, which will then enjoy the remaining coupons and redemption at maturity. New bonds sell at face value. Interest rates are high double digits and yields are set in the bond aftermarket. This free, de-centralized and open after market buttresses the trustless system.

Pricing and settling Solidus Bond transactions in bitcoin is just a matter of Swiftcoin/bitcoin exchange rates. Expansion and contraction of digital currency (money) supply replaces the exchange rate yo-yo.

Swiftcoin uses peer to peer, public-key cryptography, which relies on creating an interlocking pair of encryption keys: a public key that can be freely distributed, and a private one that must be kept secret. The public key is treated as an address to which value may be sent, akin to an account number. Each transaction involves the paying party signing over a portion or all of the value in one of these addresses by using his private key to perform an operation, called "signing", on the contents of the transfer, which includes the recipient's address. Anyone can use the sender's public key to verify that the sender's private key signed the transaction. All transactions are appended to a ledger known as the block chain.

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