PROFITABLE PAYMENTS

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Abstract: Payment Utility & Coeval Value

There has been no shortage of confusion, not least of all on the part of regulators, when it comes to the status of digital assets. Therefore, we seek here upfront to help define such status and role that these assets play in the newly emergent crypto economy.

On January 25, 2017, the Securities & Exchange Commission issued an investor bulleting stating that, among other things "a virtual currency is a digital representation of value that can be digitally traded and functions as a medium of exchange, unit of account, or store of value". The Commission went on to characterize the issuance of such mediums of value exchange as being "issued by a virtual organization or other capital raising entity" adding that "a smart contract serves to automate certain functions of the organization."

In the same report, the Commission advised investors to "ask what your money will be used for and what rights the virtual coin or token provides to you. The promoter should have a clear business plan that you can read and that you understand."

In December of the same year, the SEC stopped a number of Initial Coin Offerings (ICOs) in their tracks, but most notable of all was a California restaurant offering utility tokens that doubled-up as multi-level marketing-style customer (token purchase) recruitment rewards.

What was notable was the SEC's comments about Munchee's top management activities: the tokn was "marketed to people interested in those assets [the tokens] – and those profits [from the token sales] – rather than to people who, for example, might have wanted MUN tokens to buy advertising or increase their 'tier' as a reviewer on the Munchee App." The token profits would involve "significant entrepreneurial and managerial efforts of others", according to the SEC. Because of this, among other things, the tokens qualified as unregistered securities.

An investor who may have been diligently following the SEC's advice from January and had thus scrutinized Muchee's management team and business plan, and who had determed the individuals to be capable project leaders might have been a little surprised to note the return of the MUN tokens shortly after contributing to the ICO. That it was the same government agency that had initially instructed the investor to pay close attention to where the money was being deployed and for what purpose it was being used, and to make a judgement based on a project's business case who now seemed to be implying this was not appropriate no doubt created more than a little confusion.

More puzzling still, in neither case was the Commission either right or wrong. Digital assets are indeed a "store of value" but smart contracts, which seek to synthetically replicate Blockchain payment mechanisms on a lighter-weight platform, have nothing at all to do with any of the "functions of an organization." Similarly, while Munchee's management ought not

to have been implying that their own corporate profitability was relevant to their token offering, advocating that investors would be able to make a profit does not in and of itself transform a utility token sale into a full-fledged securities offering.

The challenge is one that requires a proper definition before absurdity takes hold. For it is clear that no one is participating in an offering of any sort of digital asset without having at all in mind the idea of selling later on for a profit. And yet the SEC seems to be most displeased about any sort of claim of future profit share from the purchase of utilty tokens on the part of promoters: that same December, the agency filed fraud charges against Canada-based Plexcorps founders for promoting a 1300% return on their utility tokens and a handful of other similar cases. It referred back to a July 2017 report in which the agency cited Stock.It's use of the Decentralised Autonomous Organisation (DAO) to raise capital "with the objective of operating as a for-profit entity that would create and hold a corpus of assets through the sale of DAO Tokens to investors."

These sorts of utterances have given rise to something resembling more than a mere mild absurdity in cryptocurrency circles, whereby one is by inference expected to issue and to purchase utility tokens that are tradeable on crypto exchanges around the world without any utterance of the intention of making a profit from doing so.

Clearly, this is simply not the case and rather than leave the subject of profit as a grey area, it would seem to be much more practical to define the sort of profit and the way in which profit occurs that is acceptable for Blockchain-based utility tokens than to suspend what is otherwise an inordinate amount of disbelief. It is our aim here to clarify these very issues and crystalize much more definitively the definition of a token offering as understood from the point of view of having predominant Blockchain utility.

Profitable Payments

That the token might result in the purchaser of it making a profit is not necessarily in and of itself a regulatory problem. The issues arise when the token becomes disentangled from its core function as a mechanism of payment and instead seems to resemble a passive income investment that benefits the holder no matter what.

In Blockchain circles, one hears a lot the term "utility" thrown about, but what does this really mean? Utility is a type of functionality specific to a product's manufacturing. A car stereo or a television has an entertainment utility; an automobile or a private jet has a transport utility etc. For Blockchain assets, the function is one of being a payment utility. Satoshi invented Blockchain as a means of manufacturing a method of unique and non-forgeable payment for use across the world by anyone, no matter their domestic, political, racial or whatever other conditions. Thus, Blockchain as a ledger based technology is understood to be a method of manufacturing payment.

For a payment mechanism to be valid, value must at some point in the utility equation be loaded onto the object in the same way as

for transportation to be justified as a core utility, speed must be applied to the product. This is different however to saying that a car must perpetually be in motion and increasing in acceleration all the time, or even that it must be varying its acceleration constantly. If that were the case, a transport utility would resemble something that looked much more like a planet or a comet, and would assume a very different sort of utility – it would in effect have a satellite utility. Just as a transportation vehicle cannot be considered to be in the same class as a satellite operator, and must therefore be handled differently, so it is the case with Blockchian assets and securities. Specifically, the asset must be first and foremost predominantly a method of *payment* before it is anything else. Therefore, a dividend-loaded, guaranteed and/or management-enhanced token defeats the purpose and, one must concede, point, of justifying such utility in the first place.

That is not the same thing as saying that a token cannot be considered to be a profitable purchase item, however – it can. We believe we have found the perfect middle ground to the ambiguity that has been stirred up around this subject lately in our innovation of a new sort of payment utility – the manufacture of a *profitable payment*.

Profitable payments are a strange occurrence in conventional economic environments, since they only really occur in situations where there is either hyperinflation or hyperdeflation in one of the currencies being used to pay for goods or services. In cryptofinance however, hyperdeflation and hyperinflation are very much the norm in terms of everyday economic conditions. This is because while they are structured for the most part like commodities, with finite supply sources and tightly-held (non-liquid) stakeholder clusters, they are traded against one another indiscriminately in the way that standard payment utilities – i.e. sovereign currencies – are. This unique status makes Blockchain assets the perfect profitable payment source.

The Token Family

First, let's review some key facts about what Blockchain is and how value occurs in digital assets:

- Digital currency is created as a result of the following: *Value = Utility*. This process is assimilated via a Blockchain which peruses a binomial random walk to create a unique Proof-of-work algorithm (POS uses a similar function). This process creates what is called a value coeval. A Value Coeval is strictly where chain, shop and network propositions of value are correlated, but it can equally be expressed as $V = U$.

- Unless $V = U$ there can be no digital currency as double-spending, unidentifiable value etc. becomes a problem. This was Satoshi's finding with respect to payment utility.

- In recent years there have been attempts by innovators to create a form of payee utility out of the payment utility inherent in the value coeval. The attempts have for the most part focused around

recreating securitised products on the Blockchain by employing methods such as introducing token dividends, profit-sharing token buybacks etc. The problem with these mechanisms is they do not resolve the critical question which is: how do we convert payment utility into payee utility?

- Here is where things get interesting. Essentially, via using the escrow feature of a smart contract across a spread of assets, we are able to synthesis a continual payment cycle:

- A way in which payment utility can be converted into payee utility on Blockchain is as follows: we subdivide the *value = utility* that produces the value on the Blockchain into three separate components: *core utility*, *option utility* and *exchange utility*. We then take these three forms of sub-divided utility and divide them by the value coeval that is inherent to Blockchain functionality. We do this via a smart contract which simulates a Blockchain creation without actually being an individual Blockchain (and thereby bypassing the requirement for adding additional coeval value which would clearly make this process obsolete if it were not so): *[Core Utility * Option Utility * Exchange Utility] / Value Coeval*

- This discovery is significant because it allows us to create a system whereby payment utility is converted into payee utility between every individual function of payment utility separately while still conforming to Blockchain standards such as being an independent non-securitised token offering

- In other words (CU*OU*EU)/VC = Blockchain Payee Payment Utility

- What has made this possible is the act of using Blockchain payment utility as a mechanism of "profitable payment" which thereby allows the payee to make a payment while still benefitting from the greater amount of FIAT-convertible proceeds of such a payment.

- This is because of the dynamic multiplication of the three components of Blockchain payment utility: simply, when expressed in a Blockchain (POW/POS) equations it will necessarily create an enhanced form of payment utility (Blockchain payee utility)

Of course, many ICOs could – and should – copy a similar modus operandus, and that would solve the vagueness in Blockchain asset values. If all ICOs functioned as swap-cycle tokens as opposed to being in and of themselves the end point of value, we could predict values based on EPS and P/E style equations as for listed companies, except the tokens would remain unsecuritized. That would be a huge value innovation.

Factory Banking Profitable Payments

The diagram below shows the process of factory banking, which is the manufacture of value via a information technology solution. This particular variant of factory banking is called the token family due to the structure of the relationships between the smart contracts in the system. Here, an embryo smart contract is mined by an embryo token to produce parent tokens. The embryo is

returned to the *feeminer* (sender) along with the parents, except the embryo is frozen in the wallet for a specified period. If the smart contract to which the parent is sent is full of seed tokens (ETH, ZUR etc.) then the parent is a pregnant token; conversely if the smart contract is empty of seed or has negligible seed to mine the parent is a barren token. The pregnant token is received by the parent smart contract and is destroyed: the feeminer is returned a percentage share of the seed.

The seed is deposited in the parent smart contract by way of one or more child tokens which exchange continuously back and forth for seed tokens, and when doing so, a fee is extracted from the seed and paid into the parent smart contract. The system results in the value of the seed being inherited by all other tokens in the hierarchy—embryo, parent and child—to different extents the likes of which financial derivatives products reference the values of the underlying securities they are underwritten by. Value inheritance however is purely a function of the utility of the individual tokens specific roles within this factory banking context and is not a pre-functional quality of any token in particular. Ω

Right: *In the diagram, the Tokens are structured in a top-down fashion, with the heavier utilities feeding the lesser utilities in a trickle-down fashion.*
As a result, the children are placed at the head of the token family with the parents in the center, interacting between the embryo that produces endless supply of parent tokens even as they feemine the seed of the children simultaneously.
If there is a scarcity of seed in the parent smart contract, the parent will remain barren until more seed is deposited in the form of the core cryptocurrency upon the blockchain of which the token family runs, after which time it will become pregnant again.