Examining Taxation of Fiat Money and Bitcoins Vis-A-Vis Regulated Cryptocurrencies

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ABSTRACT

In this paper, we examine the Taxation aspects of Fiat money and Bitcoins vis-a-vis Regulated Cryptocurrencies. We start off by briefly explaining the concept of cryptocurrencies (also referred to as cryptocoins in this paper). We then discuss the concept of Regulated and Sovereign Backed Cryptocurrencies (RSBCs). Then we envisage a scenario where cryptocoins are the main medium of exchange. The taxation aspects of Paper money, Bitcoins and RSBCs are then deliberated with the pros and cons of taxation for each currency format. The currency that can support an Automated Tax Regime is also debated. Finally, the paper concludes by arranging in ascending order, the currencies which are easily amenable to and compliant with taxation policies and laws.

INTRODUCTION

A cryptocurrency is a medium of exchange using cryptographic techniques to safeguard transactions and also manage the formation of additional units of the currency.

A BlockChain is a widely disseminated archive of data that maintains a continually-expanding register of records fully and reliably protected from any alteration or modification. Each block has a timestamp and link to the preceding block.

A Crypto wallet is an encrypted electronic device that allows an individual to make electronic cryptocurrency transactions. Each wallet will have a public key visible to anyone. But it can be operated by only a person who has a private key.

When people send cryptocoins to each other, someone has to keep account of who spent how much at what time. In case of fiat money (or paper money) it is done by banks (known as Trusted Third Parties, for which they charge a commission).But in case of Cryptocoins it is registered on a ledger called BlockChain (with nil or minimal fees).

The cryptocoin network makes this possible by detailing all the transactions made during a certain timeframe into a list. This list is known as a block. A certain set of people called 'miners' verify these transactions mathematically and register them on the BlockChain. Those bona-fide miners who have successfully verified the transactions are paid freshly created Cryptocoins. This is how miners are rewarded, and new cryptocoins are generated. This is also the reason why no transaction costs are levied, as the network (in the form of miners) verifies the transactions.

Bitcoin is a peer-to-peer based cryptocurrency which is not backed by any commodity and (unlike fiat money) carries no sovereign guarantee whatsoever.

Regulated and Sovereign Backed Cryptocurrencies (RSBC), on the other hand are government backed cryptocurrency akin to paper currency, but in digital form. In this system, the cryptocoins (known as NationCoins) are backed by Sovereign Guarantee.

They are run on a highly secure Controlled BlockChain(CBC) in which Sovereign backed Cryptocurrencies will be transacted without any hassles. NationCoins are completely managed by the Sovereign Authority i.e the Government.

This system is based on the K-Y Protocol[1]. The K-Y Protocol is a set of rules and instructions to implement the Regulated and Sovereign

Backed Cryptocurrency (RSBC) system. It envisages a set of institutions to achieve its objectives. Some of them are as follows-

DAR-Digital Asset Reserve- Organisation which will frame policies and manage the CBC based on the K-Y Protocol.

DATA: it is the technical arm of the DAR. Its functions consist of setting up of the hardware and software infrastructure required to run and sustain the RSBC. It will set up the nodes, hard-code the K-Y Protocol into software, and setup the computing network. It will Manage and maintain the varied infrastructure needed for RSBCs.

NLD-National Ledger Database- It is the custodian of the Controlled BlockChain. It is the ledger which will record all transactions that involve the respective NationCoins and other digital assets.

Taxation of Fiat Money

A tax is a levy imposed on an individual or by the state to underwrite a number of public expenses. A failure to comply is punishable by law.

Taxation, on one hand helps to fill the coffers of the state. On the other hand, it has significant effects on the economy and the people's way of life.

In the earlier days, state officials used to visit every household and collect taxes. This resulted in spending large amount resources by the state to collect taxes. As economies developed over a period of centuries, citizens were encouraged to come forward and pay the taxes themselves. In this manner the State could save resources and manpower and go only after those who actively evaded taxes.

Fiat/paper money transactions are known as cash/liquid transactions. Without the generation of receipts, cash transactions are hard to trace. Cash transactions are thus the preferred mode of exchange in illegal/black markets. This makes cash transactions ideal to evade taxes and hide such activities from governments or regulatory authorities.

This unaccounted money fuels what is known as the underground economy. One measure of the underground economy is the "tax gap". It is the difference between the amount of tax revenues due to the government and the tax money actually collected. In the U.S, This is estimated to be about \$450–\$500 billion [2].Thus, it is easiest to evade taxes when money is in the form of Fiat or cash form.

<u>Taxation of Bitcoin-like cryptocurrencies</u>

One can have multiple Bitcoin addresses, which are apparently 'anonymous'. We say 'apparently' because there are techniques to “De-anonymize” accounts. But at any given time, one can safely conclude that for the time being, he/she is anonymous when they use their Bitcoin wallets.

Joe is a tax evader, and Kate is a tax collector. Robert is a third person who is Joe’s friend.

Joe has \$10,000 of unaccounted money. He is afraid that Kate can swoop down anytime and arrest him. Joe goes to Robert and pays him his \$10,000. Robert transfers an equivalent amount of Bitcoins from his (anonymous) Bitcoin wallet to Joe’s (anonymous) Bitcoin wallet. Joe can then transfer it to a series of other addresses within or outside his wallet.

He can even transfer the Bitcoins out of his country where he converts Bitcoins into the native currency and stores it in a bank, which does not insist on customer identity verification.

Kate has no way of knowing that Robert received money from Joe (because of No receipt). She has no way of knowing (in the short term), which particular Bitcoin wallet belongs to Joe or Robert.Joe happily secretes away his money, from the eyes of the taxwoman Kate.

It is apparent from the above illustration that Bitcoin (i.e. unregulated, decentralized cryptocurrencies) has tipped the balance in favour of the tax evader.

It reality, it is possible to discern the identities of Bitcoin wallet holders by a process called as de-anonymization.

Computer scientists associate activities with Bitcoin wallet usage. Even geographically pinpointing the user is possible. But it may take time and will most probably be retrospective. Thus the entire exercise of siphoning money off to a tax haven is already over by the time the tax evader is identified and apprehended.

Another advantage of an unregulated Cryptocurrency (like Bitcoin) is that it can be moved seamlessly across borders with no impediments whatsoever. And it can be done in a matter of seconds. This provides tax evaders with the added incentive to use Bitcoin as a vehicle to transfer their assets in liquid form outside the borders of the taxing country.

No government or sovereign agency whatsoever is needed in any manner to move Bitcoins. As such, real time transactions are not monitored by government agencies (or so, the people think).

But the transactions are all available on the Blockchain, which can be later verified or examined by law enforcement agencies. That needs cooperation among various nations, and a lot of cumbersome procedures.

One more advantage of Bitcoin wallets (for tax evaders) is that money in Bitcoin wallets cannot be automatically deducted by government agencies. If you owe tax to the government and do not pay, the government can deduct the owed tax money from your bank account. It cannot do that with your Bitcoin wallet though. At least not so easily. To do so, it has to seize your wallet and your private key. For that, it has to apprehend you. And then you have to disclose your private key. This is a lot of work for the government.

Overall, in the short term, Bitcoin is the ideal way for the tax evader to escape being taxed.

The possibility of something being misused does not make that thing inherently 'bad', as perceived by public opinion. As a matter of fact, Bitcoin is in actuality, better than paper currency/cash when it comes to monitoring transactions. Bitcoin's open Blockchain system allows anyone to view transactions. The Silk Road mastermind -Ulbricht- could be apprehended only because of the open nature of the Bitcoin Blockchain.

RSBC Taxation

RSBCs are literally sovereign backed currency notes, but in the digital world. NationCoins are controlled by the sovereign authority. The NationCoin wallets maintained by DAR will be verified for identity through the KYC norms. Therefore, every person, be he a citizen, resident or non-resident, will have a verified wallet. This will allow safe and secure transaction for honest users.

Now imagine a scenario where all Paper money is being replaced by NationCoins

As the digital economy becomes more and more pronounced, it will become difficult for people (with the intent to evade taxes) to hide their real sources of income or their identities.

The NationCoin wallet will ensure that a person's identity is known and maintained as such. The Controlled BlockChain will allow the sovereign authority to view and supervise transactions. And since the identities of the people are known to the sovereign authority, the Controlled BlockChain will be a powerful tool to maintain a rationalised tax regime.

Tax returns need no longer be filed by tax payers when NationCoins are introduced. The Sovereign authority can automatically deduct taxes of the people directly from their wallets.

DATA systems can automatically compute and churn out tax liabilities of individuals (as even property ownerships will be digitized and records maintained by the NLD). So a person's income tax, wealth tax, electricity, telephone, water, and internet bills can be deducted without the person ever undergoing the hassles of waiting in long queues for paying bills or filing tax returns. An individual's credit worthiness can be gauged by analysing the Controlled BlockChain.

Of course all of this will information can be accessed only by the Sovereign authority, lest it be misused by unscrupulous elements. A person will hardly default on his loan because Controlled BlockChain analysis will predict his default. Pre-emptive measures can then be taken to prevent him from defaulting on the loan that he has taken.

It is obvious that wide spread NationCoin usage will lead to widening of the tax net. This will also ensure that tax burden on individuals will significantly reduce.

A person's money holding can be inferred by the Government when necessary. The Government can automatically deduct taxes with no people to file tax returns. It can wind up its tax collecting infrastructure and invest those resources somewhere else.

Eventually, the tax evaders will shift to paper currencies. It will so happen that over a period, a large amount of paper currencies will be held by tax evaders, racketeers, etc. Here the black money (i.e. unaccounted for, untaxed money) economy will be separated from the legitimate, actual white economy.

Finally, the government can swoop in and bring about an amnesty scheme where it can collect more than 50% of the untaxed money as penalty. As the digital economy becomes more and more pronounced, it will become more difficult for people (intending to evade taxes) hide their real sources of income or their identities.

It is obvious that wide-spread NationCoin usage will lead to the widening of the tax net. This will also ensure that the tax burden on individuals will significantly reduce.

Suppose in a group of 1,000 people, only 100 people pay taxes. The government needs to collect $10,000 as taxes. Since only 100 people are in the tax net, it has to charge $100 for every person as a tax. Now in NationCoin usage, say 800 people have NationCoin wallets.

500 people are now in the tax net as their identities are known (The remaining 300 people cannot be taxed due to low income.)

Now, instead of collecting $100 from each person, the government collects $20 from 500 people. Its $10,000 tax target is reached. The advantage to the public is obvious. Earlier, a person paying $100 as taxes now pays only $20. That is an 80% fall in tax burden. He now has $80 more to spend. This will boost economic activity in the system, leading to more growth and prosperity.

We can thus usher in an Automated Tax Regime with the introduction of RSBCs.

Conclusion

Due to the advent of Cryptocoins, it is obvious that the status quo seen in paper currencies can no more be maintained. Bitcoin and its family of cryptocurrencies make it easy to evade taxation in the short term. But in the longer term, the evaders can be traced. The evaded money can also be accounted for, as all transactions are on the BlockChain for everyone to see. It is also evident that NationCoins have all the advantages of Bitcoin albeit without its demerits (as far as taxation is concerned) as they are Regulated and Sovereign Backed Cryptocurrencies (RSBCs).

Bitcoin is in favour of the tax evader (for the short term) whereas NationCoin has tilted the balance in favour of the tax collector.

The ease of taxation is thus as follows:-

Cash/Paper Money < Bitcoin- like Cryptocurrencies < NationCoins.

We can see that Cash is least amenable to taxation; bitcoin is easier to be taxed provided one can trace the owner of the wallets. NationCoins provide easiest means of taxation.

Thus NationCoin system appears to be the ideal currency format for taxation purposes where we can also usher in an Automated Tax Regime.

<u>References</u>

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