BitcoinSoV (BSoV): A Mineable, Deflationary, Store of Value

Mundo
admin@btcsov.com
www.btcsov.com

Abstract: A Proof of Work, Decentralized, Deflationary token. A purely peer-to-peer immutable, decentralized, Store of Value would allow anyone to store their wealth without relying on Centrally Controlled Inflationary Currencies and financial institutions. BSoV aims to provide anyone in the world with a hedge against inflation in fiat currency through a decentralized Store of Value. There have been other centralized deflationary tokens created before, but with distribution models primarily through airdrops. BSoV Is a EIP918 token and is distributed through proof of work mining, there was no pre-mine, airdrop, or ICO. BSoV is entirely community run and relies on community efforts to grow and move forward. BitcoinSoV mining bears the same difficulty adjustment every 1024 blocks, halving, eras, and max coin supply of Bitcoin, but with the speed and versatility of an ERC20 token on the Ethereum blockchain. Being on the ethereum blockchain allows for BSoV to utilize ethereum's security as well as smart contract capabilities. BSoV's smart contract capabilities allow for it to be a currency that is programmed by design to be self deflationary through every transfer. A 1% burn function programmed in BSoV's immutable smart contract allows for every transaction to incur a 1% burn of the entire transfer value, creating higher scarcity and reducing token velocity.

Introduction: Inflation in fiat currency can be seen all throughout the world. Central governments are able to print money at will causing the purchasing power of the currency to lose its value over time. In extreme cases, certain countries have suffered from hyperinflation, eroding their native fiat currencie's value in just a short amount of time. Hyperinflation occurs when there is a continuing (and often accelerating) rapid increase in the amount of money. This causes people to turn to other centralized currencies that have a slower rate of inflation. The foreign fiat currencies people switch to trying to escape hyperinflation are not immune to the same fate as their native currency, especially as it is also overseen by a centralized government. In this paper, we present an immutable, decentralized, Store of Value. A hedge against hyperinflation and inflation in general through a token that is mineable and self deflationary. BSoV is a token for all, a token anyone can utilize anywhere in the world.

Meaning of the Name, BitcoinSoV (BSoV)

 BSoV is not a fork of Bitcoin. The first part of the name, Bitcoin, was decided due to BSoV sharing some of the same principals, spirit, and token economics of Bitcoin. BSoV mining bears the same difficulty adjustment every 1024 blocks, halving, eras, and max coin supply of Bitcoin. It also has 8 decimals identical to BTC. Bitcoin was created to be used as means of exchange (MoE). Satoshi Nakamoto states in the BTC whitepaper titled, "Bitcoin: A Peer-to-Peer Electronic Cash System", that, "electronic cash (btc) would allow online payments to be sent directly from one party to another". He also states, " What is needed is an electronic payment system based on cryptographic proof instead of trust", furthermore proving that btc was created to be a Means of Exchange rather than a Store of Value. Bitcoin is a peer to peer electronic payment system and BSoV is a peer to peer deflationary store of value system. Inspiration drives innovation and BSoV was inspired by btc to succeed in creating a decentralized Store of Value. This is why I choose to incorporate the Bitcoin name into BSoV. The second part of the name, SoV, stands for "Store of Value". BSoV is self deflationary by design to discourage spending and encourage holding or storing of value. The deflationary aspect will create scarcity by reducing the total supply of BSoV overtime. One goal is to increase adoption as supply decreases. Whether or not BSoV comes to fruition as a decentralized Store of Value people seek to utilize, relies entirely on the community and adoption.

What is a Store of Value?

A store of value is an asset that maintains value and can be retrieved and exchanged at a later time. Any economy depends on money to facilitate an exchange of goods and preserve the value of an individual or business's accumulated labor. A monetary unit that serves poorly as a store of value compromises an economy's savings and reduces its ability to trade. A credible store of value must be established to allow people to confidently engage in labor and trade.

Current SoV's and their Problems

The most popular store of values are fiat currency, precious metals, and real estate. While all examples may have their own positive attributes, they rely on central forces, trust, difficult storing methods, and upkeep.

Fiat Currency

Fiat money is government-issued currency that is not backed by a physical commodity, such as gold or silver, but rather by the government that issued it. The value of fiat money is derived from the relationship between supply and demand and the stability of the issuing government, rather than the worth of a commodity backing it. Paper money such as dollars, euros, pounds, and the like only have value because the government maintains that value. However, its value fluctuates along with the economic conditions of the country that backs it. This means fiat currency needs to be trusted. Citizens must trust that the rate of printing money will not increase to the point of hyperinflation. They must trust that systemic corruption will not occur, which would make people lose faith in their native fiat currency and cause the economy to deteriorate. This was seen most recently in Venezuela in 2017 and in Zimbabwe in 2007-2008.

Zimbabwe: Hyperinflation Crisis

Zimbabwe hyperinflation 2004-2009. The government printed money to pay for the war in the Congo. Farm confiscation and droughts restricted the supply of food and other goods produced locally. More money was chasing the same amount or fewer of goods and services. As a result, hyperinflation took place. The inflation rate was 98% a day, and prices doubled every 24 hours.

Venezuela: HyperInflation Crisis

Venezuela was once the richest country in latin america. It has the largest known oil reserves in the world. But today it has the highest inflation rate in the world making food and medicine inaccessible to most Venezuelans. According to experts, Venezuela's economy began to experience hyperinflation during the first year of the new presidency in 2014. Venezuela became too dependent on oil and when oil prices plummeted it caused their economy to collapse. Through corruption, deficit spending, and the rapid printing of money, hyperinflation ran rampant. The inflation rate reached 274% in 2016, 863% in 2017, 130,060% in 2018 and 9,586% in 2019. Since 2016, the overall inflation rate has increased to 53,798,500%. Venezuelans storing their savings in Bolivars saw their money become worthless overnight.

Inflation is a Hidden Tax

Inflation has long been a hidden method of taxing individuals without their knowledge. John Kenyard stated in 1919, " By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens. By this method they not only confiscate, but they confiscate arbitrarily; and, while the process impoverishes many, it actually enriches some. The sight of this arbitrary rearrangement of riches strikes not only at security but [also] at confidence in the equity of the existing distribution of wealth.". When extra money is printed and put into circulation, it costs the government very little. The only cost to create more fiat currency is the cost of printing. Each paper bill costs pennies to manufacture and produce, they just run the printing press and it suddenly exists . So value is essentially being created from nothing. It can be easily explained using a simple analogy, inflation is like if someone were to slowly add water to your gasoline. At first you may not realize your gasoline being diluted. But as time passes, and more water is added, the gasoline would not provide the same power to your vehicle and eventually lose its value that it once provided. When the central bank prints money it results in a tax of real wealth from the holders of dollars or assets denominated in dollars. This tax is not written in law, this tax is not due on April 15th, this tax is hidden and it is regressive. It impacts those the most who do not invest in hedges against inflation. Low and middle class individuals are affected greatly as they tend to lack the liquidity and or experience to invest. In result, savers and wage workers will have their value diminish overtime. The wealthy have the means necessary to relocate their savings to investments that hedge against inflation. Therefore, the wealthy are protected from the economic cost of inflation. The poor get poorer and the rich get richer. When inflation is caused by loose monetary policy and deficit spending by a government, it results in a transfer of wealth from the holders of the fiat or assets denominated in fiat, to the government. These transfers of wealth are the heart of inflation tax. Because governments cause inflation and benefit from it, governments are directly responsible for these detrimental economic effects on the poor and middle class. Therefore, one reason BSoV was created was to give individuals freedom from centrally controlled inflationary instruments through a decentralized store of value.

Real Estate

Real estate has long been a store of value for many years and rightfully so, but it is a store of value that must be maintained through taxes and upkeep. By just holding real estate you are subject to pay property taxes. If you are unable to pay your property taxes and redeem them in the allotted time given, your property can be then legally taken from you. As time goes on normal wear and tear will take its course and more money will need to be reinvested into the property to maintain its value. Real estate is a store of value that requires trust in a sense that it is greatly impacted by centralized entities. For example, the 2008 financial crisis was the collective creation of the world's central banks, homeowners, lenders, credit rating agencies, underwriters, and investors. Lenders were the biggest culprits, freely granting loans to people who couldn't afford them. Borrowers who never imagined they could own a home were taking on loans they knew they would never be able to afford. Borrowers started defaulting, which put more houses back on the market for sale. But there were no buyers, so supply was up and demand was down and home prices started collapsing. As prices fell some borrowers suddenly had an existing mortgage for much more than what their home was currently worth. Some simply stopped paying their mortgage, leading to more defaults causing a snowball effect, pushing home prices down further. Real estate has made many people wealthy many times over, but it is a store of value you must oversee diligently to maintain its value.

Precious Metals

Like real estate, precious metals have long been a popular store of value. But they are much more difficult to store on your own and exchange for goods or liquidity. Storing gold in a residential home comes with a raft of considerations, security being the obvious one if that house isn't equipped with a safe. Then there's the challenge of transporting the metal, which is heavy and cumbersome, to and from a holding facility. You can store them through a safety deposit box but then you only have access during bank hours. With bank hours being limited you won't be able to exchange or move your gold after hours or on weekends. If an investor chooses to make a large investment in coins or gold, the holding could be very bulky, exceeding the capacity of the ordinary box. This would require a third party facility to store them, adding another layer of trust needed. To make Gold liquid, you need to return your coins and bars to a dealer to sell them. Furthermore, before the dealer accepts them, you may even need to get your gold

bars refined so the dealer can verify the gold content, which costs money and takes time.

BSoV Creation & Token Details

BSoV was created on June, 17, 2019.
BSoV is a Erc-20/EIP 918 Token with the following attributes:

- No pre-mine
- No ICO
- No Dev Fund
- 21,000,000 tokens total supply
- 8 Decimals
- 1% Deflationary Burn of every transaction
- POW Mineable
- Difficulty target auto-adjusts with PoW hashrate
- Rewards decrease as more tokens are minted
- ERC20 compatibility

No ICO, Pre-mine, or Airdrop

Since 2017 crypto has seen its fair share of money grab ICO's raising absorbent amounts of capital without even providing a working product. This has clouded the true spirit of decentralized crypto currencies and their communities. Listed below are the top 10 largest ICO fundraises.
1.$4 Billion
2. $1.7 billion
3. $320 million
4. $300 million
5. $258 million
6. $257 million
7. $232 million
8. $157.9 million
9. $152 million
10. $150.9 million

It is very ironic that "decentralized" crypto currencies are raising funds in centralized manners with absolutely no transparency. We see most of them fade away and some even exit scam abruptly, leaving the truly decentralized projects left to restore faith in the crypto community. There needs to be alternative distribution models other than the ICO model. BSoV had no ICO, Pre-mine, or Airdrop. All BSoV tokens are strictly distributed by proof-of-work (PoW). This means rather than being distributed by humans, BSoV is distributed through computational calculations provided by physical hardware.

BSoV: Store of Value

There has yet to be a decentralized digital commodity that has positioned itself as a deflationary store of value until BSoV. We are in the digital age and BSoV can be accessed from anywhere in the world due to its ease of use. This allows for BSoV to be a universal Store of Value for the entire world. BSoV aligns itself as a commodity since it is distributed only using Proof of Work Mining identical to the Bitcoin and 0xbtc model. Its value is derived from mining and the resources exchanged to produce tokens. These resources provided may create a base value for the token. As difficulty increases to mine BSoV, so will the cost, this should be directly reflected in BSoV's price. Value may also be derived from scarcity through BSoV's built in deflationary mechanism. Lastly, value may be added through Proof of Commitment. The BSoV community first introduced Proof of Commitment (Po-Com) when many community members voluntarily sent their BSoV to a timelock contract to show commitment to long term holding. This Reduced token velocity further, reduced market selling pressure, and strengthened the collective integrity of token holders.

Mining on Ethereum using Proof Of Work
BSoV is mined using a simple Keccak256 (Sha3) algorithm identical to Infernal Toast's 0xbtc. Utilizing the Keccak256 (Sha3) algorithm allows for BSoV to be mined through Proof of Work and have automated difficulty adjustments.

```
keccak256(nonce, minerEthAddress, challengeNumber) < difficultyTarget
```

The mining software mines to try to find a valid nonce. If the above statement evaluates to true, then the nonce is a valid solution to the proof of work. The challengeNumber is just a recent Ethereum block hash. Every round, the challengeNumber updates to the most recent Ethereum block hash so future works cannot be mined in the past. The miner's Ethereum Address is part of the hashed solution so that when a nonce solution

is found, it is only valid for that particular miner and man in the middle attacks cannot occur. This also enables pool mining. The difficulty target becomes smaller and smaller automatically as more hashpower is added to the network.

As with Bitcoin and 0xbtc, BSoV's are generated every time a user discovers a new block by being the first to submit Proof of Work for each round. The rate of the block creation is adjusted every 1024 to aim for a relatively constant adjustment period equal to approximately 6 BSoV blocks per hour. The number of BSoV tokens generated per block is set to decrease logarithmically, having a 50% reduction every time half of the remaining supply has been mined.

After every block is minted, the smart contract will determine if it is time to adjust the difficulty. This occurs every 1024 mined blocks. Just before this occurs, the contract increments the reward era if necessary, this is if the tokens minted count has exceeded the maximum era supply which is calculated via a simple halving algorithm:

max_era_supply = total_supply - (total_supply / (2 * (reward_era + 1)))

This means that the first era supply is 10500000 tokens, the second era supply is 15750000 tokens, the third era supply is 18375000 tokens and so forth. During the first era, the block reward for a mint() is 50 tokens. During the second era, the reward is 25 tokens. During the third era, the reward is 12.5 tokens and so forth. There are forty eras total until the mining will halt.

The reward era is used to calculate the mining reward. Next, the BSoV's smart contract adjusts the difficulty by first determining how many Ethereum blocks had been mined since the last adjustment. If less than 1024*60 Ethereum blocks had been mined, BSoV is being mined too quickly and the difficulty will increase. This is accomplished by reducing the size of the 'target'. When the target is smaller, valid nonces for minting are more rare and are harder to find for future mining rounds. Alternatively if BSoV is being mined too slowly the target will increase in value in order to make minting more easy to accomplish. All difficulty targets are bound within minimum and maximum difficulties of 216 and 2234 respectively.

BSoV on Ethereum Blockchain, why not a separate chain?

BSoV avoids problems related to centralization and security because it is powered by the Ethereum Network and by globally distributed miners. Ethereum is the most popular and secure smart contract platform which allows BSoV to interact with other erc20 tokens, wallets, and smart contracts.

Deflation

BSoV is self deflationary by design. For every transfer of BSoV, 1% of the transaction is automatically burned, reducing the total supply forever. This is coded directly into the BSoV contract source code. This Burn function seen below is immutable and can never be altered.

```
function transferFrom(address from, address to, uint tokens) public returns(bool success) {
    uint toBurn = tokens.mul(burnPercent).div(1000);
    uint toSend = tokens.sub(toBurn);
    balances[from] = balances[from].sub(tokens);
    allowed[from][msg.sender] = allowed[from][msg.sender].sub(tokens);
    balances[to] = balances[to].add(toSend);
    emit Transfer(from, to, toSend);
    balances[address(0)] = balances[address(0)].add(toBurn);
    emit Transfer(from, address(0), toBurn);
    return true;
}
```

For example, If I, Mundo, send Satoshi 1,000 BSoV he would receive 990. The other 10 BSoV would be automatically burned to account for the 1% burn function. This takes place for every BSoV transaction. These burns are completely transparent as is BSoV and can be tracked here.

Deflation Encourages Holding

 As mentioned earlier, BSoV is not meant to be a Means of Exchange like Bitcoin is intended to be. The 1% transaction burn makes BSoV deflationary by design compared to the original Bitcoin (BTC). You are penalized by sending your BSoV. So to avoid loss you are incentivized to hold the tokens instead, therefore stimulating supply scarcity and reducing token velocity. This may make BSoV better suited as a Store of Value if adoption can be achieved.

But isn't Bitcoin already Deflationary?

Some may say Bitcoin is deflationary as well, as coins have been lost thus reducing its overall supply. The argument relies on Bitcoin users losing their coins and never retrieving them again. Bitcoin is not and never will be deflationary by design. The argument can be stated for both sides. What if a user is able to retrieve an old wallet with Bitcoins in it? Does that now make Bitcoin inflationary as more tokens are now entered into circulation? BSoV does not rely on its users to lose access to their tokens to claim it is deflationary, it simply is programmed to be through each transfer. BSoV does not aim to compete with Bitcoin but aims to be an alternative to Bitcoin as a Store of Value instead of a means of Exchange.

Solving the Deflationary Distribution Problem

There are many deflationary tokens which have been distributed through Airdrops which is no different than the government printing money out of thin air. Airdrops are distributed by centralized team members. Airdrops are notoriously known for being spammed by bots to acquire as many free tokens as possible to then dump later on. Although there can be techniques used to try and mitigate airdrop spamming, no resources are exchanged to receive the tokens. This can easily create a community of uncommitted holders. BSoV is the world's first deflationary token that is distributed through proof of work. Through this distribution method BSoV is entirely decentralized and relies on no centralized entity to disperse tokens to its community.

A Committed Community

With no funds being raised, BSoV relies entirely on community efforts and a grass root movement to grow and increase adoption. There may have been one person who launched the contract source code but there is no centralized team. The community is the team and any one anywhere in the world can join. BSoV works together to perform tasks to move BSoV forward. The BSoV community discusses ideas and takes action first rather than pool together funds initially. We have a BSoV donation ethereum address in which community members have made donations to in order to complete a

task at hand that may require funds. Any donation made is unsolicited and done so voluntarily.

A Committed Community (continued)

The BSoV community is committed through Proof Of Commitment (Po-Com). The community introduced Proof of Commitment by voluntarily sending their tokens to a smart contract that locks the BSoV tokens for a duration of time. The tokens are unable to be moved from the contract and are locked until the lock duration has been exceeded. Sending tokens to the timelock contract does not produce staking rewards or dividends and in fact incurs a 1% transaction burn to send to the timelock contract, and then another to receive back after the release. This Reduces token velocity further, reduces market selling pressure, and strengthens the collective integrity of token holders. What has transpired is individuals from all over the world have come together and put the communities best interest first rather than their own. In result, it has made BSoV what it is today and will shape its future tomorrow. It's as the saying goes, "If You Want To Go Fast, Go Alone. If You Want To Go Far, Go Together."

Sources:

https://github.com/0xbitcoin/white-paper

https://bitcoin.org/bitcoin.pdf