**STOCK TO FLOW, MODEL OF THE BITCOIN DECENTRALIZED DIGITAL CURRENCY,**

Decentralization and cryptocurrency have changed the way people handle finance and currency. From a centralized economy that depends solely on central figures or third parties to enable transactions, we now have a blockchain economy with its immutable network, enabling transactions in a peer to peer manner without the need for a central figure or third parties. The Bitcoin cryptocurrency was one and was globally acclaimed as the future of the financial world.

Nowadays, blockchain has really blossomed beyond measures with many other digital tokens being developed and notably the Ethereum blockchain with smart contracts, leaving Bitcoin as the most stable cryptocurrency in the market.

Talking about the Stock to Flow (S2F) Model of Bitcoin currency, It’s a way to measure just how much of the digital currency that is in circulation. It is expressly declared through its Stock to Flow Ratio, which is the ratio of the amount of Bitcoin in circulation to the amount that is produced or mined yearly. It is mostly a process applied to natural resources that possess value such as gold, silver, and other naturally occurring resources. When it comes to Bitcoin, it is a process that is maintained to ensure that the number of BTC that is mined yearly does not exceed in such a manner that will crash its price in the market. Bitcoin is mostly produced through a mining process which is a method through which working nodes are rewarded for verifying transactions on the blockchain. The process takes up a lot of computing power and electricity to achieve because each node would have to download the blockchain state of the Bitcoin network including the hash algorithm used to calculate verified transactions. Thus, whenever a node verifies a transaction, they are incentivized by getting rewards in blockchain tokens, through which more BTC are mined.

To ensure that there aren’t more than enough BTC coins than is needed, it’s Stock to Flow model is maintained through a Bitcoin Halving process. The event is also called a Halvening process during which all nodes can only mine half of the original coins that they are used to getting. The Halving process has been scheduled to happen after every 210,000 blocks of its blockchain have been filled with verified transactions. This would amount to an estimate of every 4 years and would continue to happen until about 21 million supply of blockchain technology has been mined. The trajectory will in essence ensure that the price of Bitcoin increases exponentially each year until it becomes infinite when the apex target has been reached.

The STF model is a good process for BTC growth, price and sustainability and will be a huge factor for blockchain usability, but on the another side, it seems like a bad model that is largely overrated.

First of all, the S2F model depicts the price of blockchain will double exponentially each year because of it, but it does not explain how possible it can be. The reason is because it takes a lot of energy to mine Bitcoin and with very large computing power, it is very expensive to maintain. Scalability is already an issue of the Bitcoin consensus algorithm and with its meager 7 transaction verifications per second, coupled with the time it takes to produce new blocks when they get full, it will be almost impossible for the Stock to Flow model to continue in that process.

Another flaw of the S2F is that it doesn’t take into consideration the price interaction between BTC and other natural resources such as gold and even other cryptocurrencies. For instance, it is hard to determine the S2F of gold since several countries of the world have their valuation of the precious metal, hence BTC could not possibly continue to expand in prices exponentially with uncertainties surrounding other resources of value. It is therefore sufficient to say that process is a subjective one that would prove to turn out badly for the Bitcoin economy.

**CONCLUSION**

There is no denying the fact that Bitcoin has achieved a lot of success in the global finance market much more than was expected by individuals, but the Stock to Flow Model still has a lot to demonstrate in terms of its sustainability for Bitcoin growth. Till all the other facts have been obtained, the S2F will continue to be a theoretical experiment that has passed the hypothesis level.