

HALVING OF BITCOIN'S

INTRODUCTION:

Bitcoin halving refers to a periodic process in the bitcoin network where the rewards given to the Miners for mining a new block in the bitcoin blockchain or developing a proof of work (generating a Nonce), is halved after a constant period of 4 years (Average time to mine 210,000 blocks)

Bitcoin inventor: Satoshi Nakamoto (name used by the creator(s) of bitcoin) designed or rather programmed this network to limit the supply of Bitcoins.

One of the reasons that could be interpreted behind this decision can be, that limiting the supply of bitcoin will increase its scarcity over time, which would further increase its demand and value.

The rewards can be expressed in **SATOSHI'S** where one satoshi is equal to 0.00000001 bitcoins, since a satoshi is the smallest unit of measurement in the network it cannot be further divided and since the network uses bit-shift operators the block rewards are rounded off to the nearest integer and further considering the average time to generate a new block in the blockchain (10 min), the last bitcoin is expected to be mined by 2140.

EFFECTS OF BITCOIN HALVING:

1) **Demand:** The first reward was 50 bitcoins which is now scaled down to 6.25 bitcoins (as in 2020) and is expected to drop to 3.125 bitcoins in 2024, so by reducing the number of new bitcoins introduced its demand is expected to rise.

2) **Investments:** Bitcoin wasn't intended as an investment, it was intended as a payment channel expelling the need of a third/trust party, but seeing its increasing demand and potential; investors step foot into this realm. Investors perceive halving as reduced coin supply but it can also mean that the investment value or capital would rise if the effects remain the same.

3) **Mining:** Bitcoin Halving directly impacts the Miners as their rewards are reduced after every 4 years and after a point of time when the bitcoin supply hypothetically reaches its cap value the miner would then have to rely on the transaction fees as their reward, which they will likely increase in order to support the large CPU computational and electricity cost.

By Akshat Tripathi(23GG10003).