

Tail Emission #1 VO & General Script

Introduction

Tail emission is a unique feature of Monero that ensures network security through a fixed block reward of 0.6XMR every two minutes. It is an essential tool for creating a sustainable base layer that is not reliant on a fee market.

The Bitcoin model and instability

Bitcoin's fee model consists of block rewards that are cut in half every four years, as well as static block size, which creates a situation where users must bid higher fees to ensure their transactions are included in the next block due to limited space. Over time, the idea is that only transaction fees will be used to secure the Bitcoin network.

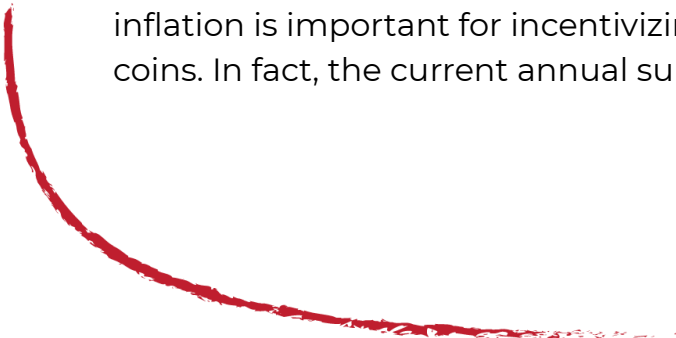
The instability of Bitcoin's base layer

Downsides to this system can already be observed today. Because the block reward is cut in half every four years, the value of Bitcoin must increase. Otherwise, miners will be forced to raise transaction fees or sell hardware in order to offset lower rewards. Furthermore, in times of high usage, transactions have experienced large fee hikes due to the competitive fee market

The Monero Model

Tail emission solves this by having a constant, low inflation, preventing shocks to the block reward distribution. Block sizes are also not static, so as transactions increase, the blocks grow in response, preventing fee markets from harming usage. This is relevant because Tail Emission serves as a defense against bad actors looking to take advantage of this -- if miners decide to stuff as many transactions as possible into a block to maximize their fees, the 0.6XMR block reward will be burned. This penalty also stops spam attacks from suddenly increasing the block size.

Lastly, while 'inflation' may be a scary word, Tail Emission's smooth, predictable inflation is important for incentivizing the mining network and for replacing lost coins. In fact, the current annual supply increase with tail emission amounts to

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only ~0.86%. To compare, the annual supply increase of gold is roughly 1-2% per year.

Conclusion

Tail Emission is a fundamental feature of Monero that secures the base layer by alleviating the necessity of a fee market and by incentivizing the mining network to secure the Monero blockchain. Because of tail emission, Monero's base layer is self-sufficient and therefore not dependent on centralized, second layer solutions currently being proposed by the Bitcoin community.

Best regards,

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