

Sum of All Fees Paid and Market Value to Realized Value

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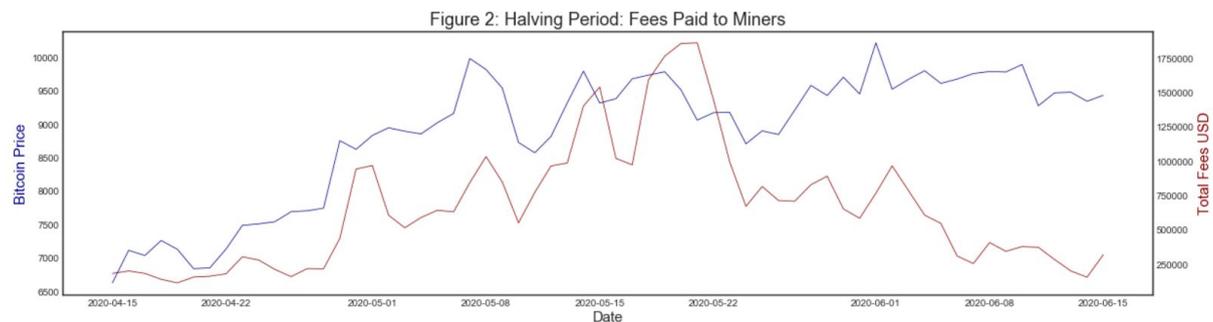
RedBlock would like to thank [Cryptoquant.com](https://cryptoquant.com) for their support in providing us with real time on-chain and market data.

Sum of All Fees Paid to Miners



The sum of all fees paid to miners is the totality of the fees that are paid each time a Bitcoin transaction is completed as a form of block reward or revenue. The work required to validate transactions and make the Bitcoin network work is done by miners. Miners spend vast amounts of computer power and energy doing this for a financial reward. For every block added to the blockchain comes a bounty (currently 6.25 BTC), as well as all the fees sent with the transactions that were included in the block. For this reason, miners have a financial incentive to prioritize the validation of transactions that include a higher fee. Analysts say that miners might seek to compensate revenue losses through higher transaction fees.

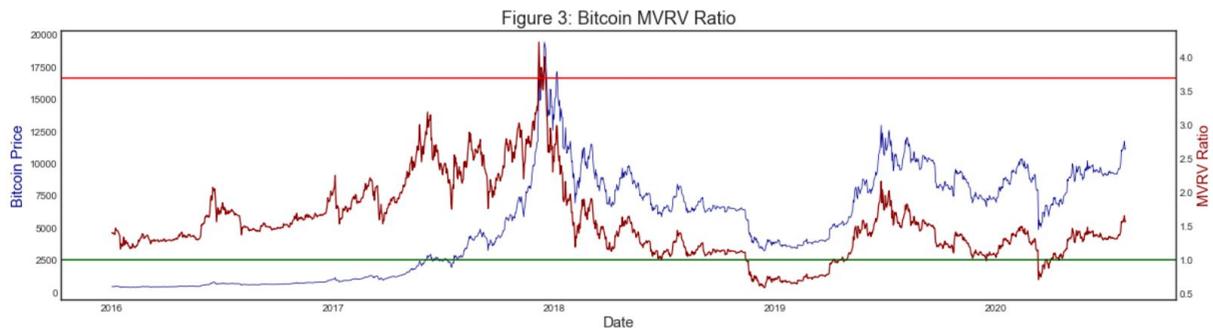
In Figure 1, from January 1st 2017 to August 1st 2020, the sum of all fees has been mainly stable when the Bitcoin price has itself been stable or gone down. However, once the Bitcoin price increases, the fees paid to miners increased as well. The highest sum of all fees paid occurred during the 2017 bull run when the total fees increased from \$1 billion to \$2 trillion.



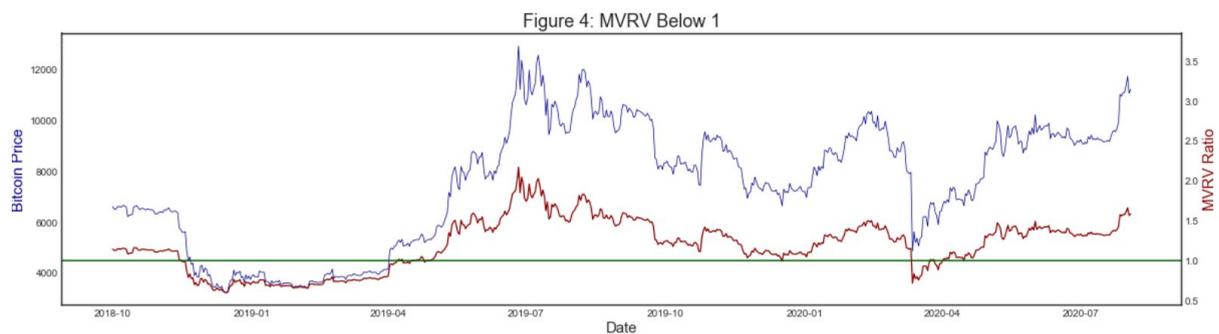
Every 210,000 blocks mined, or about every four years, the reward given to Bitcoin miners for processing transactions is cut in half. This halves the rate at which new Bitcoin is released into circulation. This is Bitcoin's way of using a synthetic form of inflation that halves every four years until all Bitcoin is mined and in circulation. Miners reap less Bitcoins with each halving. The latest event in May 2020 slashed rewards paid to miners by 50% to 6.25 Bitcoin. As the rate of inflation reduces whilst adoption increases, investors assume that there will be continued upward pressure on Bitcoin prices over the long term.

According to Figure 2, Bitcoin miners earned 44% more in transaction fees in the nine days since the halving than they did for the whole of April. In March, miners collected \$30,231,923 in transaction fees. For context, miners earned \$6,043,370 as fees in April, before the halving, and \$11,956,581 in June, after the halving.

MVRV (Market Value to Realized Value)



MVRV (Market Value to Realized Value) is the division of Market Cap (Market Value) by Realized Cap (Total Realized Value), and aims to identify periods where an asset is undervalued or overvalued. The Market Cap is obtained by using the last traded price and multiplying by the coins in circulation. On the other hand, Realized Cap approaches the value paid for all coins in existence by summing the market value of coins at the time they last moved. MVRV is a long-term tool that is only applicable for long timeframes, such as multi-year analyses.



As seen in Figure 4, the best period to accumulate Bitcoins is when the market value exceeds the realized value (shown by the MVRV ratio below 1). In the last four years, the Bitcoin MVRV

has only been below 1 for six months in 2019 when the Bitcoin price went below \$6,000, and one month in 2020 when the price plummeted below \$5,000.

Interestingly, this does not mean that Bitcoin was necessarily overvalued. Looking at price history charts, even when MVRV is over 1, Bitcoin's price may still have room to grow. Some investors consider Bitcoin overvalued when its MVRV ratio exceeds 3.7. For example, during the 2017 bull run, once Bitcoin passed the 3.7 line around the \$17,500 price level, Bitcoin's price plummeted to around \$7,000, a 60% decrease. Following the MVRV strategy, traders could have made four long trades in total in the last three years, including a buy on February 2017, November 2018, and March 2020, as well as a sell on December of 2017 during the bull run.

Source: Data collected from CryptoQuant and Bitstamp exchange website