

# Mine or Buy BTC?

This report looks at the tradeoffs of buying Bitcoin vs purchasing a miner.

It is generally cheaper to mine Bitcoin than to purchase it at the going exchange rate.

Miners spend between \$20k and \$40k on electricity to mine 1 BTC, depending on machine efficiency and electricity rate.

This does NOT mean this is the most PROFITABLE strategy. Mining at scale requires a large hashrate, infrastructure, and access to cheap electricity.

For many individual Bitcoin investors, purchasing BTC directly makes the most sense.

This is where Simple Mining comes in.

The goal of Simple Mining is to bridge this gap and allow the average Bitcoin investor to gain exposure to a PROFITABLE mining position.

#### Because at the end of the day, you want to choose the strategy that stacks the most sats.

We can view mining as almost a hashprice call option, and it might make sense to have exposure to that.

This report will analyze historical numbers to get an idea for future scenarios.

#### Has it been profitable to mine Bitcoin in the last 4-year cycle?

Yes, for the most part, but as with most things like this, many variables are in play.

We will first look at the time period of 7/24/20 to 7/24/24.

Both dates are  $\sim$  70 to 90 days after a halving(decreased block subsidy). For context, the Bitcoin exchange rate follows a 4-year halving cycle:



This will be helpful to evaluate when is the best time to enter a mining position.

For historical insight, we will use a hypothetical case study of Bitcoin investors Bob and Jane.

They are both looking to deploy capital with the goal of stacking as much BTC as possible.

They each decide to make a lump sum allocation and a dollar-cost average for the above period.

# **Bob: Spot Buy with DCA**

- A lump sum purchase on 7/24/20 of \$2,500 (cost of new-gen miner).
- The lump sum spot buy would gain ~.26 BTC based on the BTC price on 7/24/2020
- Start a daily DCA of \$6 (daily cost of running \$19).
- We will fix exchange fees at 1%, although this will have a minimal impact over this time period.
- From 7/24/20 to 7/24/24, this would result in ~ 0.30 BTC accumulated using a DCA calculator.
- The total BTC stacked from this strategy is = **0.56 BTC** (lump sum + DCA)

## Jane: Purchase BTC Miner

- A lump sum purchase of an S19 on 7/22/20(top tier ASIC at the time) for ~ \$2,500
- Machine operation specs are 95 Th/s, 34.2 W/Th, \$0.08/kWh.
- We will fix pool fees at 0.07% (our pool fee currently)
- This machine would mine a total of 0.62 BTC from 7/24/20 to 7/24/24.
- The machine costs roughly \$6/day in electricity, resulting in \$8760 over 4 years.
- The opportunity cost of this is 0.30 BTC, which could have been DCA'd, so we will subtract this from the miner revenue.
- Finally, the BTC gained from the sale of the S19 on 7/24/24 would be ~ \$670 or ~ 0.01 BTC.
- The total BTC stacked from this strategy is 0.62 + 0.01 0.30 = 0.33 BTC

### This looks like a no-brainer initially.

But this is assuming a 4-year use of the S19.

If we rerun this with a 2-year term, things look much different.

# **Bob: Spot Buy with DCA**

- A lump sum purchase on 7/22/20 of \$2,500
- Acquisition of ~.26 BTC based on BTC price on 7/22/2020
- Start a daily DCA of \$6 (daily cost of running \$19).
- DCA from 7/24/20 to 7/24/22 would result in 0.15 BTC accumulated.
- The total BTC stacked from this strategy is = 0.41 BTC (lump sum + DCA)

### Jane: Purchase BTC Miner

- A lump sum purchase of an S19 on 7/24/20 (top tier ASIC) for \$2,500.
- Machine operation specs are the same as before: 95 Th/s, 34.2 W/Th, \$0.08/kWh.
- This machine would mine a total of 0.44 BTC from 7/24/20 to 7/24/22.
- The DCA opportunity cost is \$6 per day for electricity, which would be 0.15 BTC (see above)
- Finally, the BTC gained from selling the S19 on 7/22/22 would be ~ 0.18 BTC.
- The total BTC stacked from this strategy is 0.44 + 0.18 0.15 = 0.47 BTC

#### The miner strategy stacks .06 BTC more than DCA in this case.

This example also does not include potential tax depreciation and KYC benefits.

### Taxes

If Jane's yearly income is \$100k, then according to current bonus depreciation rules, she could depreciate 60% of asset value in the first year and reduce her taxable income:

\$100k(yearly income) - \$1500(60% of miner purchase price) = \$98.5k taxable income.

### KYC

KYC stands for Know-Your-Customer. Most exchanges in the United States are required to obtain sensitive identification data from customers.

This means your identity can be associated with the coins purchased through the exchange. For many, this presents a privacy risk.

Non-KYC Bitcoin is typically exchanged at a premium (peer-to-peer platforms, Bitcoin ATMs, etc.)

Currently, you are not required to give up your identity to mine Bitcoin with Simple Mining. This presents a valuable perk to Bitcoin mining and holds varying value to individuals.

This analysis shows the importance of the entry point for the miner.

Mining can be more profitable if you believe that Bitcoin's price will increase faster than the hashrate over time (or the price will decrease slower than the hashrate decreases.)



#### Good rule of thumb:

New generation machines purchased at hashprice bottoms (where miner capitulation is the highest) appreciate in value during pumps in the exchange rate, and mined profits remain fixed because hashrate lags behind(price increases faster than miners can come online).



There is a positive correlation between the price of mining computers and the price of Bitcoin:





BTC: Puell Multiple

The Puell Multiple is the ratio of the daily miner income (in USD) to the yearly average.

This helps to establish periods where miner incomes are in extreme profit, or likely to be distressed.

Puell Multiple > 4.0 indicates miners currently earn 400% of their yearly average and are thus very profitable (creating an incentive to liquidate coins into market strength).

Puell Multiple < 0.6 indicates miners are earning 60% of their yearly average, and are increasingly unprofitable, and potentially experiencing income stress (creating an incentive to liquidate coins to balance sheets).

This lines up with the hypothesis of hashrate-price decoupling and miner peak miner capitulation being a good time to secure a mining position.

There is no one-size-fits-all answer when it comes to mining Bitcoin.

Individuals need to factor in their own circumstances and time preferences.

Mining profitability calculators are a good way to project the daily revenue and cost of various machines.

Check out the Simple Mining Profitability Calculator:

Miner Revenue Calculator									
Bitcoin Price: \$60,332.56 Current Hashprice: \$42.51 (PH) Calculated Electricity Cost: \$0.080/kWh									
These calculations are based on the markets current 'hashprice', we do not guarantee the revenue/profit from these miner models listed below. To learn how hashprice is calculated learn more here: https://docs.luxor.tech/hashprice									
ID	MODEL	RELEASE DATE	HASHRATE	WATTS	EFFICIENCY	DAILY COST	DAILY REVENUE	DAILY PROFIT	OP MARGIN
1	Antminer S21 Pro	Jul 2024	234 TH	3510	15 W/TH	\$6.74	\$9.95	\$3.21	32.25%
2	Antminer S21	August 2023	200 TH	3500	17.5 W/TH	\$6.72	\$8.50	\$1.78	20.96%
3	Antminer S21	Feb 2024	195 TH	3410	17.5 W/TH	\$6.55	\$8.29	\$1.74	21.01%
4	Antminer S21	Feb 2024	188 TH	3290	17.5 W/TH	\$6.32	\$7.99	\$1.67	20.96%
5	Antminer S19 XP	Jul 2022	141 TH	3030	21.5 W/TH	\$5.82	\$5.99	\$0.18	2.94%

No outcome is guaranteed in the Bitcoin industry. Volatility is to be expected. The comparison of buying vs mining is a decision each investor must evaluate.

This is just a chip off the block when evaluating mining profitability.

Grid improvement, credit, and contribution to mining distribution can also impact which route is the best.

In summary,

- Mining CAN be more profitable than DCA
- Having a solid cycle entry point MATTERS
- MINE when price outpaces hashrate or miners are capitulating.
- ASIC prices rise with the price of Bitcoin
- Simple Mining helps make this process SIMPLE

If you are interested in getting a new-gen miner or want to learn more about Simple Mining, reach out to Nick - <u>nick@simplemining.io</u>

YouTube: <u>https://www.youtube.com/@simpleminingio?sub\_confirmation=1</u>

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