





Mine vs Buy Bitcoin

This report breaks down an **important** question.

A question hopefully everyone mining Bitcoin has had before.

The question:

Which strategy returns more Bitcoin: Mining or Buying?

There is never a simple answer to this question.

But there is information that can help us make good strategy decisions.

Understanding is a process of constantly being reminded.

I'm writing this, and even I need to be reminded of how this works.

Mining vs Buying: Which is Better?

One is not better than the other. Both have a place in a portfolio.

But there are tradeoffs to buying spot Bitcoin vs purchasing a miner.

If we exclude machine cost, it is generally cheaper to mine Bitcoin than to purchase it at the going exchange rate.

Most miners spend between \$30k and \$60k on electricity to mine 1 BTC.

Miner profit is the difference between the Bitcoin price and the cost of acquisition (electricity, repairs, etc.).

This does NOT mean mining is always the most PROFITABLE strategy.

Mining at scale requires access to cheap electricity, infrastructure, repair technicians, etc.

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

This is the pain point Simple Mining solves.

You want to mine Bitcoin, but there is a high barrier to entry.

You want to make money and save time with minimal effort.

Everyone does.

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.

There's no point in mining if you would have ended up with more Bitcoin from just making regular purchases on an exchange.

We can view mining as almost a hashprice call option.

We are betting hashprice will go up in relation to our <u>hashcost</u>.

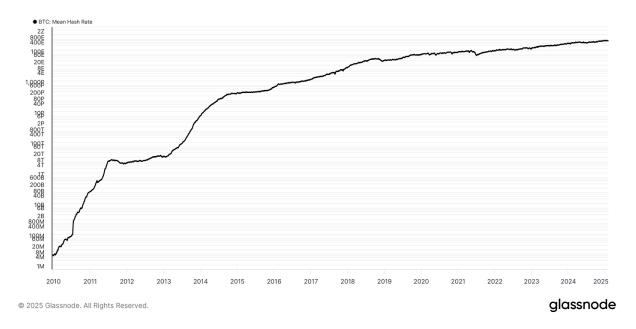
This letter will analyze historical numbers to get an idea for future scenarios.

Previous Mining Profitability

Mining has been a profitable venture.

We know this because of the rise in hashrate (miners contributing hash):

Hashrate



This chart makes it look like mining is becoming less profitable

Not necessarily the case. This is a log chart (the y-axis goes up in multiples).

But the chart does show how mining machines are starting to slow down in performance (diminishing improvements).

There are limitations to how efficient you can make an ASIC — for now.

Let's first look at the last epoch.

An epoch is just a period of time in Bitcoin's halving schedule.

In epoch 4 (2020-2024), 6.25 BTC was issued per block.



This epoch ended on April 20th, 2024, when the block subsidy was "cut in half" to 3.125 BTC. We are now in epoch 5.

The theory is, the Bitcoin exchange rate has a 4-year "cycle" around each halving epoch:



Stock-to-Flow Ratio



Vertical dotted lines are halvings.

Cycle theory is closely related to the Bitcoin stock-to-flow model.

The idea is that as Bitcoins flow (block subsidy) decreases, the stock (outstanding supply) increases at a slower rate, which increases scarcity.

Basic supply & demand: The supply goes down. The demand stays the same or goes up.

The result: The price goes up.

This is the macro context for mining.

This is helpful to determine when is the best time to enter a mining position.

Let's run a case study with Bitcoin investors Bob and Jane over the last epoch.

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 then a dollar-cost average for the period above.

Bob: Spot Buy with DCA

- A lump sum purchase of \$2,500 (cost of new-gen miner in 2020).
- The lump sum spot buy would gain ~0.20 BTC based on average BTC price (\$12k).
- Start a daily DCA of \$6 (daily cost of running S19).
- We will fix exchange fees at 1%, although this will have a minimal impact over this time period.
- A \$6 daily DCA from 05/11/20 to 04/20/24 (epoch 4) results in ~ 0.35 BTC accumulated.
- The total BTC stacked from this strategy is 0.20 + 0.35 = 0.55 BTC

Jane: Purchase BTC Miner

- A lump sum purchase of an S19 on 05/11/20 (top tier ASIC at the time) for ~ \$2,500
- The machine operates at 95 Th/s, 34.2 W/Th, \$0.08/kWh.
- We will fix pool fees and downtime at a 2% cost.
- This machine would mine a total of 0.60 BTC in epoch 4.
- 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 selling the S19 in 2024 would be ~ \$1000 or ~ 0.017 BTC.
- The total BTC stacked from this strategy is 0.60 + 0.017 0.30 = 0.317 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 of \$2,500 in 2020.
- The lump sum spot buy would gain ~0.20 BTC based on average BTC price (\$12k).
- Start a daily DCA of \$6 (daily cost of running S19).
- Daily DCA for 2 years would result in 0.19 BTC accumulated.
- The total BTC stacked from this strategy is 0.20 + 0.19 = 0.39 BTC

Jane: Purchase BTC Miner

- A lump sum purchase of an S19 on 05/11/20 (top tier ASIC at the time) for ~ \$2,500
- Machine runs same as before: 95 Th/s, 34.2 W/Th, \$0.08/kWh.
- This machine would mine a total of 0.42 BTC from 05/11/20 to 05/11/22.
- The DCA opportunity cost is \$6 per day for electricity, which would be 0.19 BTC (see above)
- Finally, the BTC gained from selling the S19 on 5/11/22 would be ~ 0.21 BTC.
- The total BTC stacked from this strategy is 0.42 + 0.21 0.19 = 0.44 BTC

The miner strategy stacks .05 BTC more than DCA in this case.

This is just one example of how mining can outperform DCA.

This example EXCLUDES tax benefits, financing, and non-KYC value.

Taxes

Jane can depreciate 100% of asset value over the course of five years.

This means she can reduce her tax burden by \$2500.

Depending on your tax bracket, this could save you big time.

Financing

If the initial miner purchase price was financed, this would reduce the opportunity cost and potentially increase the Bitcoin accumulated. Always be careful leveraging debt. It's important to do the math and be mindful of the interest burden.

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 holds varying value to individuals.

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

Mining is most profitable when Bitcoin's price increases faster than the hashrate.

For example:

A new miner costs \$7/day to run and returns \$15/day in BTC.

A DCA costs \$7/day to run and returns \$7/day in BTC.

If Bitcoin's price doubles overnight:

A new miner would cost \$7/day to run and would return \$30/day in BTC.

A \$7 DCA would buy half as much BTC.

The miner could continue to mine \$30 worth of BTC daily until more hashrate could come online and increase difficulty.

In this scenario mining would return 4x the DCA strategy.

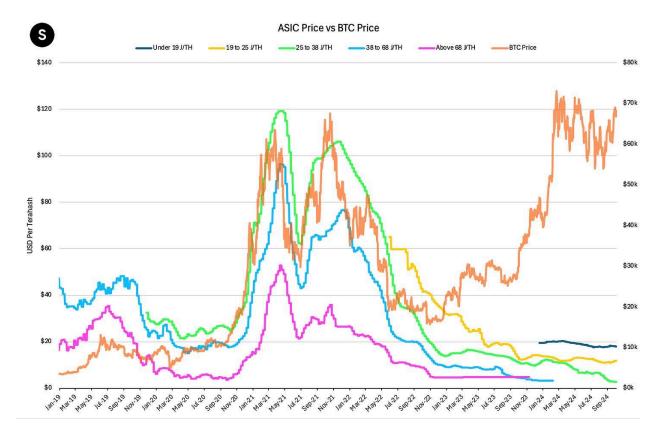


We can see this in the shaded red areas \(\bigsip \). This is where mining is most profitable.

Good rule of thumb:

Machines purchased at hashprice bottoms (where miner capitulation is the highest) appreciate during bull markets (shaded red areas), and mined profits remain fixed because hashrate lags (price increases faster than miners can come online).

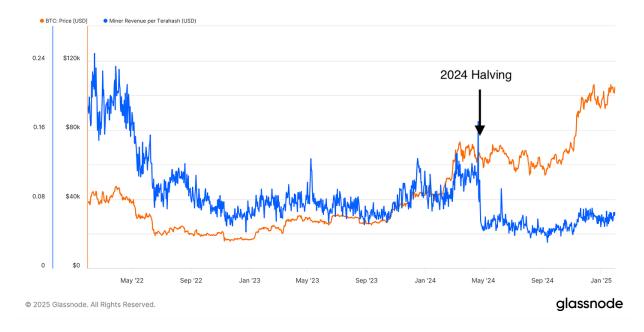
There is a positive correlation between the price of ASICs and the price of Bitcoin:



Why are ASIC prices still low when Bitcoin price is up???

The halving. Hashprice is just now returning to where it was before the 2024 halving.

Bitcoin: Miner Hash Price (Revenue per Terahash)



Bitcoin bull markets are what offset the halving (as we see in epoch 4).

ASIC prices have significant room to grow.

Another helpful indicator: The Puell Multiple

It shows the extent of decline in miner incomes:

BTC: Puell Multiple



Blue circles are when income stress is high.

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

In other words, how much are miners earning relative to the yearly average?

This helps to establish periods when miner incomes are in extreme profit or experiencing distressed margins.

Puell Multiple > 4.0 indicates miners are earning 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 indicates peak miner capitulation may be a good time to secure a mining position.

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

Individuals must make a strategy tailored to their risk profile and time preference.

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: \$104,282.22 Current Hashprice: \$59.86 (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 XP	Sept 2024	270 TH	3645	13.5 W/TH	\$6.99	\$16.16	\$9.17	56.76%
2	Antminer S21 Pro	Jul 2024	234 TH	3510	15 W/TH	\$6.74	\$14.01	\$7.27	51.89%
3	Antminer S21	August 2023	200 TH	3500	17.5 W/TH	\$6.72	\$11.97	\$5.25	43.87%
4	Antminer S21	Feb 2024	195 TH	3410	17.5 W/TH	\$6.55	\$11.67	\$5.13	43.91%
5	Antminer S21	Feb 2024	188 TH	3290	17.5 W/TH	\$6.32	\$11.25	\$4.94	43.87%
6	Antminer S19 XP	Jul 2022	141 TH	3030	21.5 W/TH	\$5.82	\$8.44	\$2.62	31.07%
7	Antminer S19 XP	Jul 2022	134 TH	2880	21.5 W/TH	\$5.38	\$8.02	\$2.65	32.98%

No outcome is guaranteed in the Bitcoin industry.

Volatility is to be expected.

In summary,

- Mining is a valuable portfolio component.
- Having a solid entry point matters.
- ASIC prices rise in bull markets.
- Simple Mining makes this process easy.

If you are interested in getting a miner or want to learn more about Simple Mining, send us an email — sales@simplemining.io

YouTube: https://www.youtube.com/@simpleminingio?sub confirmation=1

X/Twitter: https://x.com/simpleminingio

Website: https://simplemining.io/