

The Big Picture

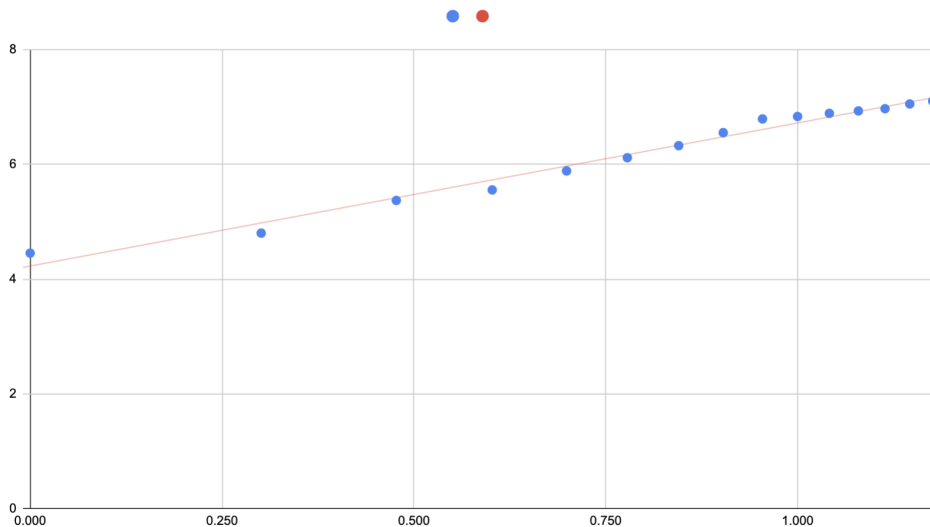
What we know with high probability about Bitcoin

I want to summarize the key points of the work of [Giovani](#), [Stephen Perrenod](#), [APSK32](#), [PlanC](#), [myself](#) and others as to what we know about Bitcoin. The point is to be as clear and concise as possible.

1. Every day, new people adopt Bitcoin as a savings technology.

We can measure this as the number of Bitcoin addresses with a cutoff amount of Bitcoin. This number grows as a very consistent power law of time. The higher the cutoff rate, the lower the power. For a cutoff rate of \$100 in Bitcoin or so, the power is around 3. For [0.1 BTC, the power is 2](#). For a whole Bitcoin, the power is 1.4. The main point is the data is very clear: adoption rate is growing consistently in good markets and bad. The Correlation (0.987) is amazing.

Bitcoin Addresses with 1 BTC vs time (log/log). Growth is 1.4 Power R2=987



2. The halvings have been a key growth driver but no longer have massive impact

By January 2013, half the Bitcoin supply was mined. The supply schedule parameters set by Satoshi were “educated guesses” as to what would be needed to jump start the network. As of today 94% of the coins have been mined, and the total mining per year is

under 1%. The point here is that [scarcity is not what drives Bitcoin growth](#). The original idea of Plan B is incorrect.

3. The data is cyclical

There is clear cyclicity in the data. **Bull markets go for 3 years, with a 1 year bear market.** This is what we have seen so far. 2024 is year 2 of the cycle. This tends to be a very good year, with year 3 being the best.



Source: ("The Big Bitcoin Book", to be published in Aug 2024).

4. Bitcoin is used for large transfers

[People transfer bitcoin infrequently and in large dollar amounts](#) (\$1,000-\$5,000). This is a wire settlement layer not VISA at this point. Eventually layer 2 technologies including lightning and legal changes such as ability to not report taxes on small transactions could make Bitcoin used for general transfers

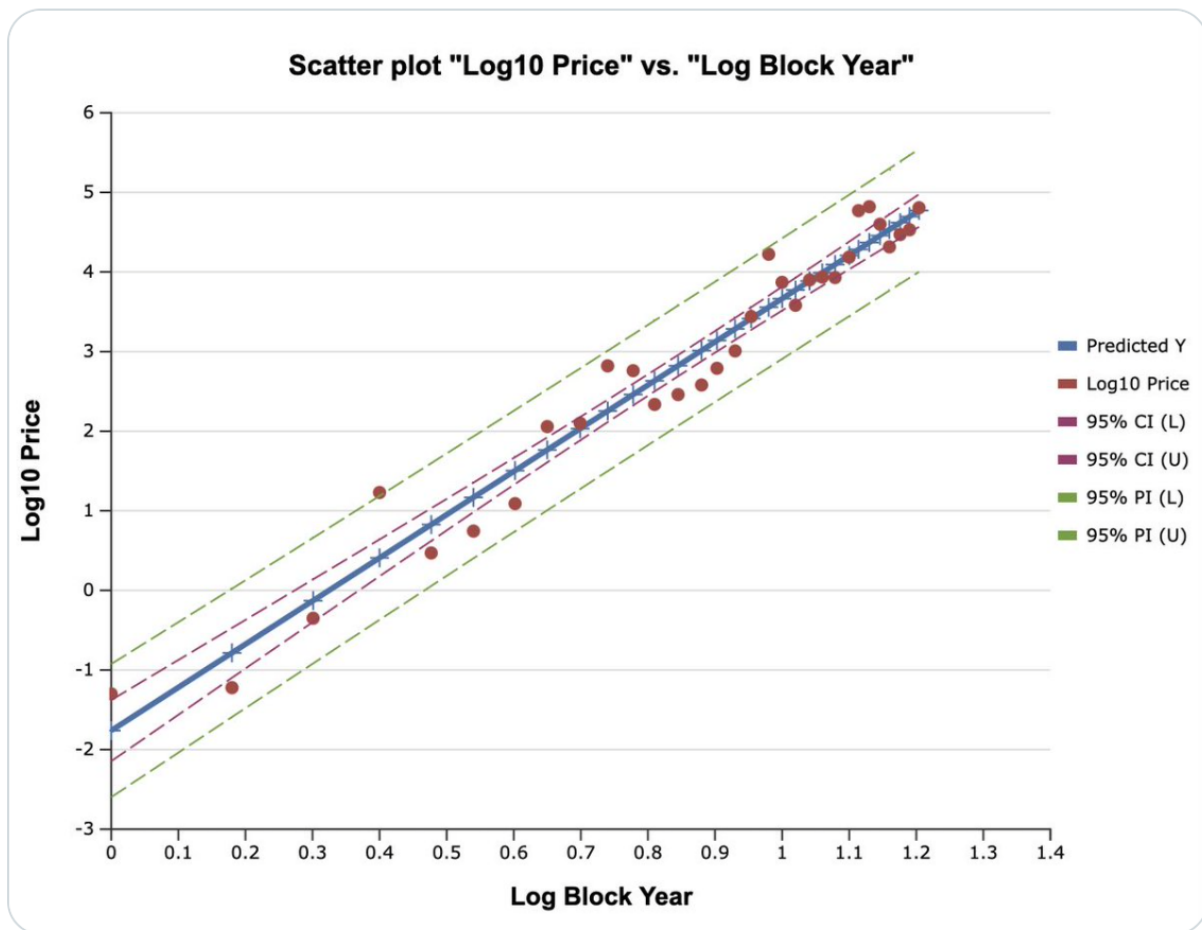
5. Price grows like the power law of time.

With the supply very close to fixed, and adoption growing as the cube of time, the price is growing as the 5.8th power of time, with 0.25 volatility in log space. This is remarkably consistent from a statistical point of view, with very high correlation and stable parameters. A good real time model for this is [BitBo](#)



6. Price tends to be move volatile on the upside than the downside

[Bitcoin tends to never go beyond one standard deviation below trendline](#), but spikes up to 2 standard deviations on the upside (example 2017, 2020). There are many ways to look at this, but it's clear the data is somewhat asymmetric and favors bull market explosions.



7. There are mathematical models that are consistent with both Power and S-curves

Per [Stephen Perrenod](#):

“ Bitcoin is not on an exponential, which would be unstable. It’s either on a power law or an S-curve, but not a logistic style S-curve, rather on a Weibull c.d.f. S-curve. And surprise, surprise, in the early years a Weibull S-curve looks precisely like a power law and not like an exponential. “

8. Volatility is going down

The cumulative mean of Bitcoin Volatility since July 1, 2011.

Clear downtrend.

(See @theRealPlanC for details)

